



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Bureau of the Census**  
Washington, DC 20233-0001

February 28, 2001

**DSSD CENSUS 2000 PROCEDURES AND OPERATIONS MEMORANDUM SERIES B-5\***

**MEMORANDUM FOR** Howard Hogan  
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**Subject:** Accuracy and Coverage Evaluation: Person Interviewing Results

The attached document was prepared, per your request, to assist the Executive Steering Committee on A.C.E. Policy in assessing the data with and without statistical correction.

This report presents detailed information on the results of the Accuracy and Coverage Evaluation Survey person interview operation. The information in this report can help us assess how well the person interview operation worked. This report provides data for each phase of interviewing, by type of outcome and by the number of interviews conducted per day. The results provide insight about the quality of the data.

# Accuracy and Coverage Evaluation: Person Interviewing Results

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# **Accuracy and Coverage Evaluation 2000: Person Interviewing**

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## **Executive Summary**

As part of the Accuracy and Coverage Evaluation (A.C.E.) for Census 2000, A.C.E. field interviewers conducted interviews with the households in the A.C.E. sample to obtain demographic and residency information about the occupants of the household. The interviewers obtained this information for both the census day residents and the residents on the day of the interview. This is known as the person interviewing operation.

The interviewing operation had two phases: telephone and personal visit. The personal visit also used a nonresponse conversion operation (NRCO) to try converting the noninterviews by using the best interviewers to attempt the interview.

Dates of the operation:

- Telephone Phase April 24, 2000-June 13, 2000
- Personal Visit Phase June 19, 2000-September 11, 2000
- Nonresponse Conversion (NRCO) July 27, 2000-September 11, 2000

All A.C.E. interview activities were planned to end on September 1, 2000. However, one local census office (LCO), Hialeah, Florida required more time to complete the census data collection operations. As a result, the subsequent A.C.E. person interviewing for Hialeah was delayed until August 18, 2000-September 11, 2000. All other LCOs finished interviewing on schedule, September 1, 2000.

The 2000 A.C.E. did not use a paper form as we had in the 1990 Post-Enumeration Survey. We used computer assisted personal interviewing (CAPI) software.

## **Why was the interviewing operation successful?**

The interviewing operation was successful because

- 99.9 percent of interviews resulted in a satisfactory outcome. Only 0.12 percent of all interviews were classified as either refusals, language barrier, or no knowledgeable respondent noninterviews.
- every Local Census Office finished on schedule.
- we completed twenty-nine percent of the total A.C.E. workload during the telephone phase, so we got an interview with much less time transpiring between Census Day and the day of the interview. Early interviews reduce recall bias. Over 99 percent of the telephone cases were classified as complete or partial interviews and were conducted with a household member.

- eighty-four percent of the personal visit interviews were classified as either complete or partial interviews and 14 percent were found to be vacant on interview day. This accounts for 98 percent of the personal visit workload. Of the remaining 2 percent, 1.9 percent were nonexistent units on interview day and 0.2 percent were noninterviews.
- interviewers converted 70.8 percent of the nonresponse cases to complete interviews and 14.1 percent to partial interviews during NRCO. Of the remaining cases, 11.4 percent converted to vacant units and 1.5 percent to nonexistent units. Only 2.2 percent of the NRCO cases finished as refusals.
- automating the interviewing enhanced the quality of data captured in the interviews, expedited the turnaround time for reassigning interviews and getting feedback to the interviewers, and instilled the interviewers with a sense of professionalism and purpose.
- the Quality Assurance operation helped keep the rate of error low and detected a high level of data quality.

## What was the effect of the Quality Assurance?

The Quality Assurance (QA) of Person Interviewing (PI) ensured appropriate results from both the telephone and personal visit phases of the operation. Overall there were only 190 cases that failed the QA. For all such cases a replacement interview was obtained and used in the survey. We effectively weeded out several interviewers whose work contained discrepancies. This was accomplished more so by targeting for problematic cases than through cases in the preselected sample. Because the failure rate in the random sample was quite low, the volume of errors in Person Interviewing was under control.

### Highlights of the QA results:

- Targeting cases for discrepant results was successful.  
The overall failure rate for the targeted cases (0.85 percent) compared to the randomly selected cases (0.13 percent) is dramatically different. This pattern holds for both telephone and personal visit interviews. This suggests the targeting was very effective in identifying cases that were likely to fail the quality assurance.
- The quality of the person interview cases not checked by Quality Assurance is high.  
Of the QA interviews, 4.9 percent were randomly selected. The 95.1 percent of cases not in randomly selected QA can be assumed to have a remaining error rate similar to that of the randomly selected QA cases (0.13 percent). However, 171 of the remaining errors were corrected in the targeted QA sample.
- Automation enhanced the quality of the A.C.E. Person Interviewing operation.  
Because of the data edits and automated skip patterns, as well as the quick turnaround time for PI cases to get assigned and completed in QA, automating both the original person interview and the quality assurance reinterview enhanced the overall quality and efficiency of the Person Interview operation.

# Introduction

The Accuracy and Coverage Evaluation (A.C.E.) 2000 Survey measures the Census 2000 coverage of the U.S. household population. As part of this survey, A.C.E. field interviewers conducted interviews with the households in the A.C.E. sample to obtain demographic and residency information about the occupants of the household. The interviewers obtained this information for both the census day residents and the residents on the day of the interview. This is known as the person interview (PI) operation. This document presents detailed information on the results of this operation.

The person interview operation consisted of both a telephone phase and a personal visit phase. The telephone phase was conducted between April 24 and June 13, 2000. After the telephone phase was completed, the personal visit phase began. The personal visit phase occurred between June 18 and September 11, 2000.

The information in this report can help us assess how well the person interview operation worked. This report provides data for each phase of interviewing, by type of outcome and by the number of interviews conducted per day. The results provide insight about the quality of the data. The low refusal rate and high completion rate, as well as the low rate of proxy interviews are indicative of quality data.

Note that the tables presented here are different from the Decennial Management Division's management information system (MIS) reports for two reasons. First, this report excludes Puerto Rico cases while the MIS reports contain them. Second, the calculations in this paper are based on the final instrument-assigned field outcome codes for both CAPI and CAPI QA cases. The MIS reports were designed to reflect progress of interviewing in the field and so they distinguished between completing the CAPI QA cases (the QA interviewer completed the QA case) and completing the replacement interviews taken within a QA case (the QA interviewer completed the PI part of the QA case). In some instances the QA case has an outcome code indicating complete while the replacement PI interview associated with this QA case may have an outcome indicating noninterview, or vacant, or any of the other available outcome codes. In such instances the MIS reports reflected the outcome of complete while our reports used the outcome from the replacement interview.

## How did we improve the 1990 Post-Enumeration Survey design?

The Census Bureau made two main changes to the 1990 Post-Enumeration Survey (PES) design for the 2000 A.C.E. person interviewing. First, we moved from the paper based survey collection method used in the PES to Computer Assisted Personal Interviewing (CAPI). Second, the A.C.E. design permitted the use of telephone interviews to get an early start on interviewing without having to wait until Census Nonresponse Followup (NRFU) had been completed for an entire Local Census Office (LCO).



### *CAPI interviewing*

Automating the interviewing process increased the quality of data in several ways. The CAPI instrument and automated support system:

- automated the questionnaire skip patterns which eliminated interviewer errors in following complicated paths through the questions.
- incorporated data edits to ensure a predetermined quality of data before an interview was considered complete.
- instilled a sense of professionalism in the survey; interviewers reported that the laptops made them feel and appear more official- an important point when interviewing a household which may have just been enumerated by a census field representative.
- allowed for rapid reassignment of one interviewer's work to another because automation minimized the traditional obstacles of geographic boundaries and constrictive paper shuffling.
- allowed for a quick turnaround of completed interviews to headquarters and allowed for more timely feedback to the interviewers as the A.C.E. supervisors in the A.C.E. Regional Offices (ACEROs) checked the cases for quality.

The CAPI instrument collected information on three types of people:

- those who lived at the sample address at the time of the interview and on census day (nonmovers)
- those who moved into the sample address since census day (inmovers)
- those who lived at the sample address on census day but lived elsewhere at the time of the A.C.E. person interview (outmovers).

The main data collected included basic household information such as the household roster, age, sex, race, Hispanic origin, and tenure. After the rosters and demographic characteristics were obtained, the CAPI instrument established the census day residence status for the household occupants.

### *Telephone interviewing*

To enhance the efficiency and quality of the A.C.E. interview, we planned to shorten the elapsed time between Census Day and the day of the A.C.E. interview. However, to protect the independence of A.C.E. and census, we also had a constraint that prevented concurrent census Nonresponse Followup (NRFU) and A.C.E. operations in the field for a given Local Census Office (LCO). Using telephone interviews allowed us to get an early start on interviewing without waiting until NRFU had been completed for an LCO. The specific rule we applied to

preserve independence was that A.C.E. personal visit interviewers could not begin interviewing in an LCO until seven days after NRFU was at least 90 percent complete for that LCO. Although A.C.E. personal visits had to wait for the NRFU end according to this rule, A.C.E. interviewers were allowed to telephone households that were not part of NRFU while NRFU was still in the field. There was no evidence or reports that indicated any breach of independence.

Housing units whose census questionnaire data were adequately captured, and whose questionnaire included a telephone number, were eligible for the telephone phase, depending on the unit structure and whether the unit was classified as rural or urban.

Housing units whose addresses did not have house number and street names, as well as housing units in small multi-unit structures (less than 20 units), were excluded from telephone interviewing since small multi-unit structures and many houses in rural areas have addresses that are difficult for the telephone interviewer to accurately confirm over the telephone.

Shortening the elapsed time from Census Day to the A.C.E. enumeration improved data quality by diminishing recall bias. Also, starting early in an environment that was more easily controlled allowed the supervisors of the A.C.E. enumerators to gain valuable experience in conducting interviews and in operating the laptop computers before training the enumerators. The design of this process maintained the independence between the A.C.E. and the other Census 2000 operations.

During the personal visit phase, with special permission from headquarters, interviewers were allowed to contact some households by telephone. These were housing units that were difficult to reach in person because of barriers to physical access, such as encountered in gated communities or secured buildings. These cases happened very rarely. The majority occurred during the Nonresponse Conversion Operation (NRCO) and mostly in the New York City and Los Angeles areas.

## **What was the design for the person interviewing?**

The A.C.E. person interview design consisted of 300,913 units. The interviewer had no more than six weeks to complete each assigned interview. For the first three weeks, the interviewer was required to contact an eligible household member. If after three weeks the interviewer was not able to obtain an interview, the interviewer was permitted to contact a non-household member, referred to as a proxy respondent. If the interview was still not completed after six weeks, the case was reassigned to the NRCO, where the best interviewers attempted to convert the incomplete cases and refusals to completed interviews. Conversion refers to the achievement of an interview (with the household or by proxy) for previous refusals or incomplete cases by utilizing more skilled interviewers to ensure all procedures and alternatives are considered. In this report we divide the operation into the following groups:

<u>Description</u>	<u>Dates</u>
• Telephone Phase	April 24, 2000-June 13, 2000
• Personal Visit Phase	June 19, 2000-September 11, 2000
• NRCO	July 27, 2000-September 11, 2000

One local census office, Hialeah, Florida was suspected to have potentially substantial problems with census data quality. To assure correct enumeration, the Census Bureau reinterviewed every Hialeah household that did not mail back their census form. The subsequent A.C.E. person interviewing for Hialeah was delayed until August 18, 2000-September 11, 2000. All other LCOs finished interviewing on schedule, September 1, 2000.

The results of the NRCO interviewing are included in the personal visit phase tables, as well as separately in the NRCO tables to specifically tabulate the results of the nonresponse conversion operation.

## Results

The results in this report only refer to data received from field interviewing. During the next process (computer post-processing), a computer edit was used to reclassify some of the completed and partial interviews as noninterviews. For noninterview rates refer to Childers et al, 2001.

## Definitions

Field Outcome Codes: the outcome as of interview day. The computer assigned one of the following outcome codes for each interview.

- Complete All information obtained for current resident.
- Partial This is a partial interview for current resident. We have names and the answers for age, sex, group quarters and second residence questions, but the answers may be “don’t know” or “refused”.
- Refusal/No knwl Resp or Language Barrier The household respondent refused, no knowledgeable respondent could be found, or there was a language barrier. This is a rare occurrence during the telephone phase since these cases were usually reassigned to the personal visit phase.
- Vacant (Interview Day) The unit was vacant on interview day. (This is a rare occurrence for the telephone phase.)

- **Nonexistent/Not a Housing Unit (Interview Day)** The unit was nonexistent on interview day. The unit was either demolished or did not exist as a housing unit on interview day. This includes housing units found to be a business on interview day. (This is a rare occurrence for the telephone phase.)

**Respondent:** the type of respondent who completed the interview.

- **Household Member (Hhlder)** Someone who lives at the sample address and is at least 15 years old.
- **Proxy** Someone who is not a household member, such as a landlord, neighbor or friend.

**Interview Day Status:** the status of the unit on the day of the interview.

## How many interviews were completed in each phase?

Table 1 shows the personal interview workload by the telephone and personal visit phases. Similar tables are also shown by A.C.E. Regional Office (ACERO) in Appendix 1, Tables 1a and 1b.

Table 1. Distribution of PI Workload by Telephone and Personal Visit Phases

	Total Workload	Telephone Phase		Personal Visit Phase	
		Number	Percent	Number	Percent
# of Cases	300,913	88,573	29.4	212,340	70.6

The table above includes -

- cases where we obtained all respondent information
- sufficient partials where we obtained the crucial respondent information
- refusals where the respondent refused to answer questions or other noninterviews due to language barriers or lack of a knowledgeable respondent
- addresses found to be vacant or non existent housing units

Table 2a shows the distribution of PI workload by interview week. We also show this by A.C.E. Regional Office in Appendix 1 Tables 2a-2l.

Table 2a. Distribution of PI Workload by Interview Week - Unweighted

Phase	Week Starting On	Number	Percent of PI Workload
All	Total	300,913	100
Telephone	Total Telephone	88,573	29.4
	April 23, 2000	7,699	2.6
	April 30, 2000	20,590	6.8
	May 7, 2000	25,638	8.5
	May 14, 2000	19,728	6.6
	May 21, 2000	10,497	3.5
	May 28, 2000	3,232	1.1
	June 4, 2000	1,154	0.4
	June 11, 2000	35	0.0
Personal Visit	Total Personal Visit	212,340	70.6
	June 18, 2000	45,204	15.0
	June 25, 2000	57,241	19.0
	July 2, 2000	41,642	13.8
	July 9, 2000	31,344	10.4
	July 16, 2000	17,038	5.7
	July 23, 2000	7,764	2.6
	July 30, 2000	5,057	1.7
	Aug 6, 2000	3,982	1.3
	Aug 13, 2000	1,756	0.6
	Aug 20, 2000	939	0.3
	Aug 27, 2000	336	0.1
	Sept 3, 2000	36	0.0
	Sept 10, 2000	1	0.0

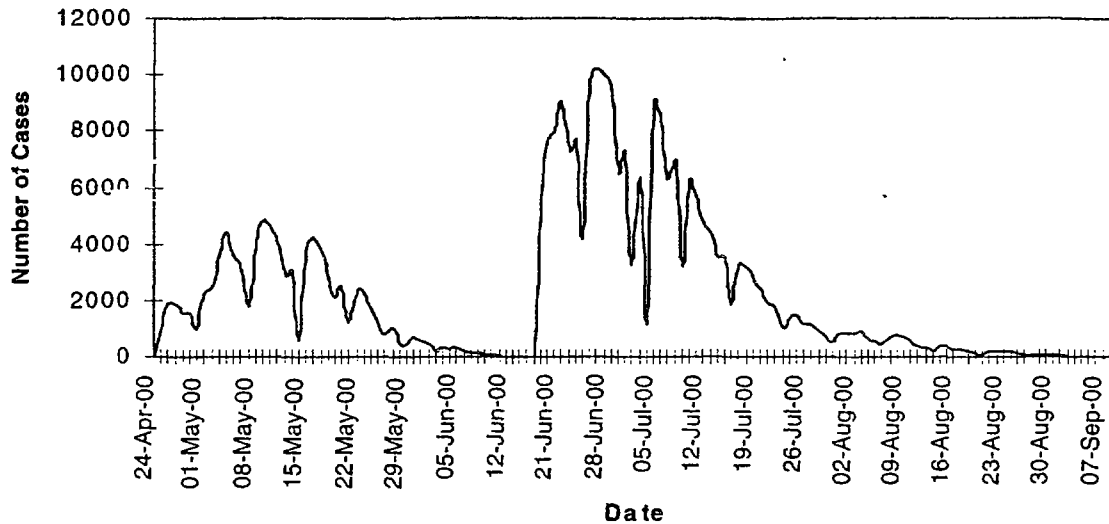
Table 2b shows the cumulative distribution of interviews by week.

Table 2b. Cumulative Distribution Interviews by Week - Unweighted

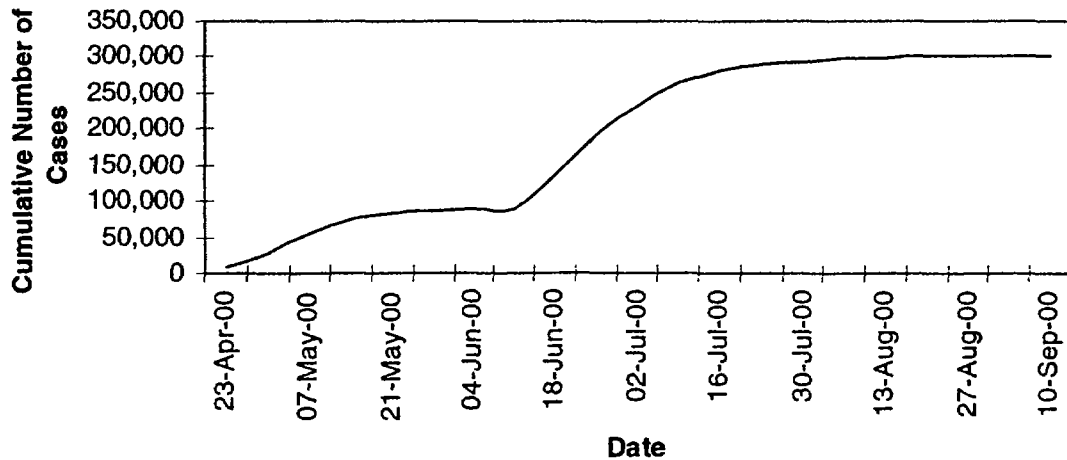
Phase	Week Starting On	Number of Cases	Cumulative Percent of PI Workload
Telephone	April 23, 2000	7,699	2.6
	April 30, 2000	20,590	9.4
	May 7, 2000	25,638	17.9
	May 14, 2000	19,728	24.5
	May 21, 2000	10,497	28.0
	May 28, 2000	3,232	29.0
	June 4, 2000	1,154	29.4
	June 11, 2000	35	29.4
Personal Visit	June 18, 2000	45,204	44.5
	June 25, 2000	57,241	63.5
	July 2, 2000	41,642	77.3
	July 9, 2000	31,344	87.7
	July 16, 2000	17,038	93.4
	July 23, 2000	7,764	96.0
	July 30, 2000	5,057	97.7
	Aug 6, 2000	3,982	99.0
	Aug 13, 2000	1,756	99.6
	Aug 20, 2000	939	99.9
	Aug 27, 2000	336	100.0
	Sept 3, 2000	36	100.0
	Sept 10, 2000	1	100.0

The following graphs show the person interviewing workload by week of completion and the cumulative distribution of interviews by week.

**Person Interviewing Workload by Week of Completion**



**Person Interviewing Cumulative Distribution of Interviews by Week**



These graphs illustrate that most interviews were conducted during the personal visit phase that started on June 19, 2000. They also show that although operations lasted until September, most interviewing was completed by mid-August.

Table 3 shows the median, mean, maximum and minimum of the PI weekly workload by each phase and overall. We also show this by Regional Office in Appendix 1 Tables 3a-3l.

Table 3. PI Weekly Workload -Unweighted

	Overall	Telephone Phase	Personal Visit Phase
Median Number of Cases per Week	7,699	9,098	5,057
Mean Number of Cases per Week	14,329.2	11,071.6	16,333.9
Maximum Number of Cases per Week	57,241	25,638	57,241
Minimum Number of Cases per Week	1	35	1

## Telephone phase results

Every A.C.E. Regional Office, conducted the telephone phase from April 24, 2000-June 13, 2000. If the respondent was reluctant to provide information by telephone or if the interviewer was not absolutely certain the correct address was contacted, the case was reassigned for a personal visit interview.

*What are the field outcome codes for telephone cases?*

Table 4 shows the unweighted distribution of PI workload during the telephone phase by field outcome code for interview day. We also show this by A.C.E. Regional Office in Appendix 2 Tables 4a and 4b.

Table 4. Distribution of PI Workload During the Telephone Phase by Field Outcome Code for Interview Day -Unweighted

	Total Workload	Completed Interviews	Partial Interviews	Refusal, No knwl Resp or Language Barrier	Vacant on Interview Day	Nonexistent on Interview Day
Number of Cases	88,573	84,180	4,341	32	13	7
Percent of Total Cases	100	95.0	4.9	0.0	0.0	0.0

Most (99.9 percent) of the telephone interviews resulted in completed (95 percent) or partial (4.9 percent) interviews.



*What are the outcome codes broken down by respondent type?*

Table 5 shows the unweighted distribution of PI workload during the telephone phase by field outcome code for the interview day and household member vs. proxy.

Table 5. Distribution of PI Workload During the Telephone Phase by Field Outcome Code for Interview Day and by Household Member vs. Proxy- Unweighted (Percentage of Total Telephone Workload )

	Total Workload	Complete Interviews	Partial Interviews	Refusals, No Knl Resp or Language Barrier	Vacant on Interview Day	Nonexistent on Interview Day
Total	88,573 (100%)	84,180 (95.0%)	4,341 (4.9%)	32 (0.0%)	13 (0.0%)	7 (0.0%)
Hhlder	88,522 (99.9%)	84,179 (95.0%)	4,340 (4.9%)	3 (0.0%)	0 (0.0%)	0 (0.0%)
Proxy	51 (0.1%)	1 (0.0%)	1 (0.0%)	29 (0.0%)	13 (0.0%)	7 (0.0%)

The table shows that 99.9 percent of the telephone interviews were completed by householders.

*What are the outcome codes by respondent type for each ACERO?*

Table 6 shows the unweighted distribution of the telephone phase PI workload by field outcome code for interview day and household member vs. proxy for each A.C.E. Regional Office.

Table 6. Distribution of PI Workload Conducted During the Telephone Phase by Field Outcome Code for Interview Day and by Household Member vs. Proxy by Regional Office -Unweighted

A.C.E. Regional Office	Total Workload			Complete Interviews		Partial Interviews		Refusal, No Knowl Resp or Language Barrier		Vacant on Interview Day		Nonexistent on Interview Day	
	All	Hhlder	Proxy	Hhlder	P r o x y	Hhlder	P r o x y	Hhlder	P r o x y	Hhlder	P r o x y	Hhlder	P r o x y
Total Cases	88,573	88,522 (99.9%)	51 (0.1%)	84,179	1	4,340	1	3	29	0	13	0	7
Boston	6,829	6,827 (100%)	2 (0.0%)	6,650	0	176	0	1	1	0	1	0	0
New York	3,376	3,375 (100%)	1 (0.0%)	3,117	0	258	0	0	1	0	0	0	0
Philadelphia	7,587	7,583 (99.9%)	4 (0.1%)	7,212	0	371	0	0	4	0	0	0	0
Detroit	7,837	7,835 (100%)	2 (0.0%)	7,552	1	283	0	0	1	0	0	0	0
Chicago	7,849	7,849 (100%)	0 (0.0%)	7,469	0	380	0	0	0	0	0	0	0
Kansas City	7,715	7,714 (100%)	1 (0.0%)	7,480	0	234	0	0	1	0	0	0	0
Seattle	7,390	7,386 (99.9%)	4 (0.1%)	7,003	0	383	0	0	2	0	2	0	0
Charlotte	8,077	8,058 (99.8%)	19 (0.2%)	7,564	0	493	1	1	16	0	0	0	2
Atlanta	8,510	8,501 (99.9%)	9 (0.1%)	7,985	0	516	0	0	1	0	6	0	2
Dallas	7,772	7,768 (99.9%)	4 (0.1%)	7,336	0	432	0	0	2	0	1	0	1
Denver	7,780	7,778 (100%)	2 (0.0%)	7,453	0	325	0	0	0	0	1	0	1
Los Angeles	7,851	7,848 (100%)	3 (0.0%)	7,358	0	489	0	1	0	0	2	0	1

*How does the census day status compare to the interview day status?*

Table 7 shows the distribution of the telephone phase PI workload by census and interview day status. These tables are shown by A.C.E Regional Office in Appendix 2 Tables 7a and 7b.

Table 7. Distribution of the Telephone Phase PI Workload by Census and Interview Day Status -Unweighted (Percentage of Total Cases)

Census Day Status	Interview Day Status				
	Total Cases	Number of Occupied Units (Complete and Partial Interviews)	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
Total Cases	88,573 (100%)	88,521 (99.9%)	13 (0.0%)	7 (0.0%)	32 (0.0%)
Number of Occupied Units	88,365 (99.8%)	88,358 (99.8%)	7 (0.0%)	0 (0.0%)	0 (0.0%)
Number of Vacant Units	49 (0.1%)	44 (0.0%)	5 (0.0%)	0 (0.0%)	0 (0.0%)
Number of Non Existent Units	9 (0.0%)	3 (0.0%)	0 (0.0%)	6 (0.0%)	0 (0.0%)
Number of Refusals/No Occupied Information Provided	150 (0.2%)	116 (0.1%)	1 (0.0%)	1 (0.0%)	32 (0.0%)

*How does census day status compare to interview day status by respondent type?*

Table 8 shows the distribution of the telephone phase PI workload by household member vs. proxy, census and interview day status. These tables are shown by A.C.E. Regional Office in Appendix 2, Tables 8a-8l.

Table 8. Distribution of the Telephone Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status - Unweighted

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	88,573	88,521	13	7	32
Hhldr	Total Hhldr	88,522	88,519	0	0	3
	Number of Occupied Units	88,356	88,356	0	0	0
	Number of Vacant Units	44	44	0	0	0
	Number of Nonexistent Units	3	3	0	0	0
	Number of Refusals/No Occupied Information Provided	119	116	0	0	3
Proxy	Total Proxy	51	2	13	7	29
	Number of Occupied Units	9	2	7	0	0
	Number of Vacant Units	5	0	5	0	0
	Number of Nonexistent Units	6	0	0	6	0
	Number of Refusals/No Occupied Information Provided	31	0	1	1	29

### *Summary of telephone phase results*

About twenty-nine percent (29.4) of the total A.C.E. workload was completed during the telephone phase. Only one regional office (New York) had a telephone interview workload less than 25 percent. The enumerators were effective in obtaining telephone interviews. Over 99 percent of the cases were classified as complete or partial interviews and were conducted with a household member.

### **Personal visit phase results**

The personal visit phase was conducted from June 19, 2000-September 1, 2000 except for Hialeah which was conducted from August 18, 2000-September 11, 2000. Nearly every case during this phase was conducted by personal visit, however in special circumstances such as locked buildings, the interview was conducted by telephone. Such cases are included in the personal visit results.

#### *What are the field outcome codes for personal visit cases?*

Table 9 below shows the distribution of the personal visit phase PI workload by field outcome code. We also show tables by Regional Office in Appendix 3. Tables 9a and 9b.

Table 9. Distribution of the Personal Visit Phase PI Workload by Field Outcome Code for Interview Day - Unweighted

	Total Workload	Complete Interviews	Partial Interviews	Refusal, No Knwl Resp or Language Barrier	Vacant on Interview Day	Nonexistent on Interview Day
Number of Cases	212,340	168,382	9,879	341	29,649	4,089
Percent of Total Cases	100	79.3	4.7	0.2	14.0	1.9

Eighty-four percent of the personal visit interviews were classified as either complete (79.3 percent) or partial interviews (4.7 percent). Only 0.2 percent were noninterviews.

*What are the outcome codes broken down by respondent type?*

Table 10 shows the unweighted distribution of interviews conducted during the personal visit phase by outcome codes and household member vs. proxy for the interview day.

Table 10. Distribution of the Personal Visit Phase PI Workload by Field Outcome Code for Interview Day and by Household Member vs. Proxy - Unweighted (Percentage of Total Personal Visit Workload)

	Total Workload	Complete Interviews	Partial Interviews	Refusals, No Kwnl Resp or Language Barrier	Vacant on Interview Day	Non Existent on Interview Day
Total	212,240 (100%)	168,382 (79.3%)	9,879 (4.7%)	341 (0.2%)	29,649 (14.0%)	4,089 (1.9%)
Hhlder	164,076 (77.3%)	158,012 (74.4%)	6,052 (2.9%)	3 (0.0%)	8 (0.0%)	1 (0.0%)
Proxy	48,264 (22.7%)	10,370 (4.9%)	3,827 (1.8%)	338 (0.2%)	29,641 (14.0%)	4,088 (1.9%)

The rate of proxy interviews was 22.7 percent and almost 70 percent of these interviews were due to units vacant on interview day (14 percent of the total) or units non existent on interview day (1.9 percent of total).

*What are the outcome codes by respondent type for each ACERO?*

Table 11 shows the unweighted distribution of the personal visit phase PI workload by interview day outcome code, household member vs. proxy.

Table 11. Distribution of the Personal Visit Phase PI Workload by Interview Day Field Outcome Code, and Household Member vs. Proxy -Unweighted

A C E. Regional Office	Total Workload			Complete Interviews		Partial Interviews		Refusal, No knowl Resp or Language Barrier		Vacant on Interview Day		Non Existent on Interview Day	
	All	Hhlder	Proxy	Hhlder	Proxy	Hh- lder	Proxy	Hh- lder	Proxy	Hh- lder	Proxy	Hh- lder	Proxy
Total	212,340	164,076 (77.3%)	48,264 (22.7%)	158,012	10,370	6,052	3,827	3	338	8	29,641	1	4,088
Boston	16,675	13,924 (83.5%)	2,751 (16.5%)	13,891	489	33	63	0	21	0	1,978	0	200
New York	14,058	11,504 (81.8%)	2,554 (18.2%)	10,859	984	645	455	0	20	0	769	0	326
Phila- delphia	16,971	13,143 (77.4%)	3,828 (22.6%)	12,556	957	587	391	0	20	0	2,148	0	312
Detroit	15,362	12,083 (78.7%)	3,279 (21.3%)	11,709	693	372	261	0	10	2	2,101	0	214
Chicago	15,970	12,613 (79.0%)	3,357 (21.0%)	12,099	897	514	287	0	41	0	1,901	0	231
Kansas City	14,987	11,744 (78.4%)	3,243 (21.6%)	11,386	588	357	181	0	19	1	2,122	0	333
Seattle	16,660	13,261 (79.6%)	3,399 (20.4%)	12,682	939	577	280	1	36	1	1,852	0	292
Charlotte	20,950	14,993 (71.6%)	5,957 (28.4%)	14,450	1,046	542	508	1	73	0	3,868	0	462
Atlanta	18,956	13,306 (70.2%)	5,650 (29.8%)	12,778	1,048	527	453	0	9	1	3,769	0	371
Dallas	19,941	15,274 (76.6%)	4,667 (23.4%)	14,766	981	506	317	1	13	1	2,859	0	497
Denver	23,268	17,162 (73.8%)	6,106 (26.2%)	16,573	834	588	269	0	5	1	4,423	0	575
Los Angeles	18,542	15,069 (81.3%)	3,473 (18.7%)	14,263	914	804	362	0	71	1	1,851	1	275

*How does the census day status compare to the interview day status?*

Table 12 shows the unweighted distribution the personal visit phase PI workload by census and interview day status. We will also show this by Regional Office in Appendix 3, Tables 12a-12l.

Table 12. Distribution of the Personal Visit PI Workload by Census and Interview Day Status -Unweighted  
(Percentage of Total Cases)

Census Day Status	Interview Day Status				
	Total Cases	Number of Occupied Units (Complete and Partial Interviews)	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
Total Cases	212,340 (100%)	178,261 (84.0%)	29,649 (14.0%)	4,089 (1.9%)	341 (0.2%)
Number of Occupied Units	175,764 (82.8%)	170,807 (80.4%)	4,877 (2.3%)	78 (0.0%)	2 (0.0%)
Number of Vacant Units	23,862 (11.2%)	6,440 (3.0%)	17,323 (8.2%)	98 (0.0%)	1 (0.0%)
Number of Nonexistent Units	10,197 (4.8%)	165 (0.1%)	6,321 (3.0%)	3,711 (1.7%)	0 (0.0%)
Number of Refusals/No Occupied Information Provided	2,517 (1.2%)	849 (0.4%)	1,128 (0.5%)	202 (0.1%)	338 (0.2%)



*How does census day status compared to interview day status by respondent type?*

Table 13 shows the distribution of personal visit phase PI workload by household member vs. proxy, census and interview day status. We also show tables by Regional Office in Appendix 3, Tables 13a-13l.

Table 13. Distribution of the Personal Visit Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Occupied Units	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
All	Total	212,340	178,261	29,649	4,089	341
Hhldr	Total Hhldr	164,076	164,064	8	1	3
	Occupied Units	157,279	157,273	6	0	0
	Vacant Units	5,882	5,882	0	0	0
	Nonexistent Units	141	140	0	1	0
	Refusals/No Occupied Information Provided	774	769	2	0	3
Proxy	Total Proxy	48,264	14,197	29,641	4,088	338
	Occupied Units	18,485	13,534	4,871	78	2
	Vacant Units	17,980	558	17,323	98	1
	Nonexistent Units	10,056	25	6,321	3,710	0
	Refusals/No Occupied Information Provided	1,743	80	1,126	202	335

### *Summary of personal visit phase results*

The majority of the workload (70.6 percent) was completed during the personal visit phase. Approximately 84 percent of the personal visit cases were complete or partial interviews. Less than one percent of these cases were noninterviews (i.e. refusals, cases where no knowledgeable respondent could be found, or cases that could not be completed due to a language barrier). Approximately 77 percent of the personal visit cases were conducted with a household member. Atlanta has the lowest percentage of interviews (70.2 percent) with household members.

### **The Nonresponse Conversion Operation**

The scheduled dates for the Nonresponse Conversion Operation (NRCO) were July 27, 2000 to September 1, 2000. However, any LCO could send cases for NRCO as soon as the personal visit phase started on June 19, 2000. All LCOs except for Hialeah finished by September 1, 2000 as scheduled. Hialeah completed NRCO on September 11, 2000. The operation was designed to reduce the number of noninterviews. NRCO used the best interviewers to aid in converting the noninterviews. This operation lasted at least two weeks for each A.C.E. cluster that still had noninterviews at the end of the six week period.

Table 14 shows the unweighted distribution of NRCO cases by their field outcome codes.

Table 14. Distribution of NRCO Cases by Field Outcome Code and A.C.E. Regional Office -Unweighted  
(Percent of Total NRCO Cases)

A.C.E. Regional Office	Total NRCO Cases	NRCO Cases Converted to Complete	NRCO Cases Converted to Partial	NRCO Cases Refused	NRCO Cases Converted to Vacant	NRCO Cases Converted to Nonexistent
Total	9,735 (100%)	6,888 (70.8%)	1,376 (14.1%)	217 (2.2%)	1,110 (11.4%)	144 (1.5%)
Boston	911 (100%)	562 (61.7%)	32 (3.5%)	7 (0.8%)	275 (30.2%)	35 (3.8%)
New York	2,260 (100%)	1,727 (76.4%)	340 (15.0%)	6 (0.3%)	146 (6.5%)	41 (1.8%)
Philadelphia	777 (100%)	543 (69.9%)	122 (15.7%)	12 (1.5%)	90 (11.6%)	10 (1.3%)
Detroit	497 (100%)	345 (69.4%)	109 (21.9%)	0 (0.0%)	41 (8.2%)	2 (0.4%)
Chicago	621 (100%)	433 (69.7%)	94 (15.1%)	35 (5.6%)	45 (7.2%)	14 (2.3%)
Kansas City	235 (100%)	168 (71.5%)	37 (15.7%)	6 (2.6%)	23 (9.8%)	1 (0.4%)
Seattle	1,501 (100%)	1,112 (74.1%)	190 (12.7%)	35 (2.3%)	143 (9.5%)	21 (1.4%)
Charlotte	924 (100%)	564 (61.0%)	140 (15.2%)	51 (5.5%)	154 (16.7%)	15 (1.6%)
Atlanta	653 (100%)	464 (71.1%)	127 (19.4%)	6 (0.9%)	56 (8.6%)	0 (0.0%)
Dallas	857 (100%)	654 (76.3%)	90 (10.5%)	2 (0.2%)	106 (12.4%)	5 (0.6%)
Denver	150 (100%)	108 (72.0%)	36 (24.0%)	0 (0.0%)	6 (4.0%)	0 (0.0%)
Los Angeles	349 (100%)	208 (59.6%)	59 (16.9%)	57 (16.3%)	25 (7.2%)	0 (0.0%)

### *Summary of NRCO results*

Interviewers were proficient in converting nonresponse cases to complete and partial interviews during NRCO. At the national level they converted 70.8 percent of the cases to complete interviews and 14.1 percent to partial interviews. Only 2.2 percent of the NRCO cases finished as refusals. The New York (76.4 percent) and Dallas (76.3 percent) ACEROs were the most successful in converting cases to complete interviews.

# Quality Assurance of the A.C.E. Person Interview Operation

## Introduction

The Quality Assurance (QA) plan for 2000 A.C.E. Person Interviewing (PI) incorporated several important changes from the plan for Person Interviewing in the 1990 Post-Enumeration Survey (PES) in response to changes in the data collection methods.

In 2000 A.C.E., we expected the quality of interviewing to be better controlled and more effective because the interviewing and quality assurance reinterviewing were fully automated. The Quality Assurance plan for 1990 consisted of checking both the accuracy of the list of household members (roster) and a verification that the original interviewer contacted the correct household. For 2000, the checks to ensure the quality of the roster of household members were built into the automated person interview instrument. Therefore, in 2000, cases with errors within the household roster were not classified as failing QA. The automated instrument:

- included additional questions to aid in capturing the people commonly left off of the roster such as roommates or live-in employees.
- established and assigned codes indicating a status of nonmover, inmover, outmover.
- included built-in quality checks to be sure information about both interview day and census day residents were collected.
- included quality checks on allowable data values.
- did not allow cases with insufficient information to be transmitted to headquarters unless a supervisor reviewed the efforts made to complete the case or reassigned the case.
- allowed for rapid assignment and completion of the QA interviews following the nightly transmittals of completed PI interviews.

In addition to these features of the instrument, the automated system provided supervisors with a variety of reports which indicated cases more likely to be inaccurate or contain missing information. These reports were used by the supervisors to target interviewers for a quality assurance reinterview. This targeting proved to be very effective – especially since turnaround was almost immediate. As a result, in 2000, we needed fewer quality assurance interviews to control the A.C.E. interviewing than the 1990 PES.

## The Quality Assurance plan

The Quality Assurance plan for the A.C.E. Computer Assisted Personal Interview (CAPI) operation consisted of a reinterview, called the QA interview, of a sample of the original interviews.

QA interviews:

- were conducted either by telephone or personal visit.
- determined whether or not the original respondent was contacted by the interviewer. If, after an initial set of questions, it appeared that the respondent was not contacted, the QA interview continued with a full person interview that replaced the original CAPI interview in all future processing.
- were investigated by the QA supervisors in the ACEROs whenever the case required a replacement interview. The QA supervisor recorded whether or not the case failed QA. In this investigation, some cases were determined to have replaced the original CAPI interview due to respondent or interviewer error, or due to instrument problems<sup>1</sup>. Such replacement cases were not classified as QA failures. QA failures were cases determined to contain discrepant results. Discrepant results do not include honest mistakes made by interviewers or respondents. Therefore the number of cases confirmed to fail QA is smaller than the number of cases which were replaced by the QA interview.

If an interviewer's work failed the QA check, then all of that interviewer's completed cases were assigned to a QA interview and any unfinished cases were reassigned to a different CAPI interviewer.

### *How did we select cases for QA?*

The QA sample consisted of a preselected random sample of five percent of the total CAPI caseload and another sample consisting of cases targeted by the QA supervisors for various indicators likely to predict inaccurate data or insufficient data quality. The targeted sample was intended to account for another five percent of the total workload. The randomly sampled cases were preselected before the cases were assigned to individual interviewers. If, after the interview, a case was determined to be a noninterview (no knowledgeable respondent could be

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<sup>1</sup>An instrument problem occurred in the QA instrument which caused incorrect text to be displayed to the interviewer. In certain situations, if the interview was originally conducted by telephone, the text asked if the respondent had recently been contacted by an interviewer with a laptop. And conversely, when the original interview was a personal visit, the text asked if the respondent had been recently contacted by telephone. Identifying the problem and implementing a procedural solution took a couple of weeks and in the interim this error caused approximately 58 cases to wrongly be categorized as 'possibly failing QA'. As part of the QA process, the QA supervisor determined that these cases did not fail QA.

found, or a refusal, or there was a language barrier), this case was not eligible for QA even if it was in the preselected sample. Such cases were sent to the Nonresponse Conversion Operation (NRCO).

The cases in the targeted sample were selected by the QA supervisors based on computer generated reports indicating interviewers whose work results could be considered to be an outlier when compared to other interviewers' work in the same area. These indicators were:

- percent of this interviewer's cases missing a telephone number
- percent of this interviewer's cases where the housing unit was determined to be vacant or the unit did not exist
- number of cases completed between 10 pm and 8 am
- number of days with more than 13 cases completed in one day
- percent of cases that were completed with a proxy respondent
- percent of cases that were missing outmover information
- percent of cases that were partial interviews

Two other reports showed the supervisors a list of respondent names for all cases and a list of interviewers with little or no work selected for a QA reinterview. The first report allowed the supervisors to detect cases with suspicious or missing names and target these interviewers for extra QA work. The second assisted the supervisors in targeting interviewers with not enough work in QA. This aided in getting some of each interviewer's work into QA as soon as possible.

### *Why were NRCO cases omitted from QA?*

Nonresponse Conversion Operation (NRCO) cases usually had no QA because NRCO involved getting cooperation from a reluctant respondent, and because we attempted to use the best interviewers for NRCO. Additionally, since NRCO occurred after the telephone and personal visit stages of person interviewing in each local census office, we assumed that work from each NRCO interviewer was adequately checked before NRCO began and that these interviewers did not fail the QA<sup>2</sup>. The NRCO caseload does not fall into the scope of this analysis.

### *Was there any additional QA on the Person Interviewing?*

In addition to the QA interview, there were other quality check procedures implemented to aid in detection of poor quality cases and inaccurate data. These included:

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<sup>2</sup>Some regions used interviewers from other current survey programs to complete the NRCO workload. For instance, New York used 30 current survey interviewers in NRCO. The interviewers brought on to work NRCO cases were some of the most experienced interviewers available and their work had already been through comparable QA processes.

- a weekly report created at headquarters which was distributed to the ACEROs listing cases which appeared to be completed interviews but would be considered noninterviews in the Person Matching operation due to incomplete names and missing demographic information. When feasible, the ACEROs reassigned such cases to get a better quality interview. This report was an ad hoc process developed during the interviewing operation.
- careful monitoring of the QA supervisors' reports on the results of their investigations into replacement cases to obtain as specific and conclusive information as possible. The Field Headquarters staff regularly reviewed these reports and often requested additional information from the regional offices.

While both of these strategies aided in the overall quality of the PI data, their results are not included in the results described in this report.

Additionally, A.C.E. operations included a field followup interview during the person matching phase which successfully detected some interviewer discrepancies such as certain whole households containing fictitious A.C.E. persons that remained after the person interviewing QA operation. To the extent possible, the person matching operation utilized the person followup results to remove such households from the population sample and classify them as noninterviews. (See Childers et al, 2001).

## **Assumptions of the QA plan**

- The QA plan centered on whether the original interviewer actually contacted the proper household. When this was the case, the interview itself was assumed to be correct because the CAPI instrument was designed to ensure data quality using data edits and automated questionnaire skip patterns. When this was not the case, a full reinterview was conducted.
- The QA plan was designed around the assumption that interviewers will either blatantly misrepresent the data or only extremely rarely do so and if someone plans to make up data they will likely not be very creative. Therefore we targeted discrepant results by looking for consistent or conspicuous types of results such as using the same name for respondents across cases, using famous names for household members, completing cases too late to really have been interviewing at someone's house, etc. Effectively identifying an interviewer who misrepresented only one or two of his/her cases out of a workload of, say 80 cases, would require a prohibitively large random sample, but because the person followup interview was expected to identify such cases, the QA plan did not attempt to identify these beyond what falls in the five percent random sample.
- The QA interview was assumed to be correct. There was no quality assurance of the quality assurance operation.

## **How was QA failure determined?**

To determine if there were in fact discrepant results entered for a case, the QA supervisor might have contacted the QA interviewer, the CAPI respondent and on rare occasions the original PI interviewer. Additionally, the supervisor might use interviewer notes (both PI and QA) or records showing each keystroke entered into the instrument. Because these personnel issues were serious situations, the benefit of the doubt was given to the PI interviewer in cases where the QA supervisor could not make a determination. We should note, however, that the replacement interview(s) was still used in these cases.

During the supervisor's evaluation of the cases with replacement interviews, some cases were determined to be erroneous but not QA failures. Such cases contained honest mistakes by the interviewer or respondent. This could happen for a variety of reasons; e.g., the original interviewer inadvertently conducted the interview at the wrong housing unit because the map was difficult to read, or the respondent was elderly and could not remember the original interview but recognized the questions as the interview got underway. Cases considered erroneous but not discrepant did not fail QA and hence, did not contribute to this assessment of the overall quality of the person interviewing data.

## **QA Results**

### **How many cases failed QA?**

For each QA case that replaced the original interview, the quality assurance staff in the ACERO was asked to complete a questionnaire with questions about potential interviewer falsification. These responses were used to determine if the case contained discrepant results, and therefore should fail QA. While some of the discrepant results may be due to falsification, we cannot assess exactly how much. Discrepant results do not include honest mistakes.



The outcome of QA cases for each phase of interview (telephone, personal visit) is classified by whether the case was randomly selected or targeted by a supervisor for a QA interview. Table 15 shows these results.

Table 15. Outcome of QA Cases by Method of Selection

QA Results	Randomly Preselected	Targeted
<b>TELEPHONE PHASE</b>		
Pass	4,398 (99.95%)	4,622 (99.52%)
Fail	2 (0.05%)	17 (0.37%)
Undetermined	0 (0.00%)	5 (0.11%)
SUBTOTAL - - Telephone	4,400 (100%)	4,644 (100%)
<b>PERSONAL VISIT PHASE</b>		
Pass	10,309 (99.70%)	15,329 (98.83%)
Fail	17 (0.16%)	154 (0.99%)
Undetermined	14 (0.14%)	28 (0.18%)
SUBTOTAL - - Personal Visit	10,340 (100%)	15,511 (100%)
<b>COMBINED TOTALS</b>		
Pass	14,707 (99.78%)	19,951 (98.99%)
Fail	19 (0.13%)	171 (0.85%)
Undetermined	14 (0.09%)	33 (0.16%)
<b>TOTAL</b>	<b>14,740</b>	<b>20,155</b>

## How many interviewers failed QA?

If an interviewer's work failed the QA check then all of that interviewer's work was either reassigned or sent to QA. Table 16 shows the number of interviewers with one or more cases failing QA out of the number of interviewers whose work had some QA. The last column shows the total number of interviewers for a region since occasionally an interviewer may not have had any work in QA. This usually occurred because either the interviewer quit after only working a few cases and none were in the preselected random sample, or because all but a few of the interviewer's cases were NRCO cases and were not eligible for QA.

Table 16. Number of Interviewers Failing QA by ACERO

ACERO	Number of interviewers with one or more interviews failing QA	Total number of interviewers whose work was QA'd	Percentage of interviewers failing QA	Total number of interviewers <sup>3</sup> (including supervisors)
Boston	1	581	0.2	610
New York	5	372	1.3	398
Philadelphia	2	464	0.4	501
Detroit	8	373	2.1	396
Chicago	0	389	0	402
Kansas City	2	405	0.5	411
Seattle	2	400	0.5	425
Charlotte	0	549	0	579
Atlanta	0	346	0	363
Dallas	16	568	2.8	593
Denver	2	617	0.3	625
Los Angeles	4	419	0.9	428
<b>TOTAL</b>	<b>42</b>	<b>5483</b>	<b>0.8</b>	<b>5731</b>

<sup>3</sup>248 interviewers (less than 5 percent) did not have a QA check of their work. This happened because 1) the interviewer worked very few cases and then quit, 2) most of their cases were already in NRCO, 3) they were supervisors who may have only done a few cases, or 4) they were experienced interviewers from other surveys brought on to help in NRCO.

## 1990 PES and 2000 A.C.E. Results

In 1990 the Census Bureau conducted a Post-Enumeration Survey (PES). The 1990 PES sample consisted of 166,065 housing units. Field interviewing was completed by July 1990 in most areas and by early September for all areas. The major differences between the 1990 PES and 2000 A.C.E. are:

- The 1990 PES utilized paper questionnaires while the 2000 A.C.E. utilized CAPI for personal visit and telephone interviewing.
- The 1990 PES did not have a telephone phase as the 2000 A.C.E. did.

## 1990 PES Interviewing results

1990 PES results are provided in Table 17. We have explored the definitions and procedures used in 1990 and are not certain that ours are comparable, therefore these data are not directly comparable to the 2000 results presented in Table 18 below. Additionally, note that to follow the same reporting patterns as in the 1990 report, the definition of occupied housing units in this section differs from that used in the rest of the report. In all other A.C.E. tables, occupied units refers only to complete and partial interviews. In this section occupied units include noninterviews (refusals, no knowledgeable respondent and language barrier).

Table 17 presents the 1990 PES interview results by outcome.

Table 17. 1990 PES PI Results: Initial Interviews by Outcome -Unweighted<sup>4</sup>

	1990 PES	
	Number	Percent of Occupied Units
Total Housing Units	166,065	
Vacant	22,247	
Occupied	143,818	100.0
Interviews		
Household Member	134,808	93.7
Other	6,745	4.7
Noninterviews	2,265	1.6

<sup>4</sup>see Hogan 1993

## 2000 A.C.E. PI results

Table 18 provides the results of the A.C.E. interviewing by Field Occupied Status. (Results from this table are not directly comparable to the results from 1990 in Table 17.)

Table 18. 2000 A.C.E. PI Results by Field Occupied Status -Unweighted

	2000 ACE	
	Number	Percent of Occupied Units
Total Housing Units	300,913	
Nonexistent Housing Units	4,096	
<b>Total Housing Units Excluding Nonexistent Units</b>	296,817	
Vacant	29,662	
Occupied	267,155	100.0
Interviews		
Household Member	252,583	94.5
Other	14,199	5.3
Noninterviews	373	0.1

## 1990 PES QA results compared to the 2000 A.C.E. QA results

In the 1990 PES, all whole households identified as containing erroneous information, including types of erroneous information we would currently classify as honest mistakes, were still called whole household fabrications. In 2000, our QA failure rate included only those households determined to contain discrepant results.

In 2000, if the QA interviewer determined that a respondent was not previously contacted by an A.C.E. interviewer, then the QA interviewer conducted a complete person interview to replace the original. There were 979 replacement interviews. QA supervisors in the ACEROs investigated these cases.

The A.C.E. Quality Assurance operation determined from the supervisor's investigations of the replacement interviews that 190 of the 34,895 households in QA failed the QA check. Of these 190, 19 were from the preselected sample and 171 were from the targeted sample. Therefore 0.13 percent of the randomly selected cases failed QA and 0.85 percent of the targeted cases failed QA. In 1990, the PES Quality Control operation found 420 whole household fabrications out of 56,000 households reinterviewed, that is, 0.75 percent of households failed the QC check (see Tremblay, 1991). Given the different QA designs, these numbers are not directly comparable.

# Conclusions

## How effective was the person interviewing?

The A.C.E. person interviewing operation collected information on nonmovers, in-movers and out-movers. Every LCO except Hialeah, Florida finished on schedule, September 1, 2000. The Census Bureau reinterviewed every household in Hialeah that did not mail back their Census 2000 form. To accommodate for this, A.C.E. person interviewing for Hialeah was delayed until August 18, 2000-September 11, 2000.

The Census Bureau effectively moved the A.C.E. interviewing operation from paper to computer assisted software (CAPI).

The interviewing operation was successful because:

- 99.9 percent of interviews resulted in a satisfactory outcome. Only 0.12 percent of all interviews were classified as either refusals, or language barrier/no knowledgeable respondent noninterviews.
- twenty-nine percent of the total A.C.E. workload was completed during the telephone phase, therefore we got an interview with a much shorter period of time transpiring between Census Day and the day of the interview. Early interviews prevent recall bias. Over 99 percent of the telephone cases were classified as complete or partial interviews and were conducted with a household member.
- eighty-four percent of the personal visit interviews were classified as either complete or partial interviews and 14 percent were found to be vacant on interview day. This accounts for 98 percent of the PV workload. Of the remaining 2 percent, 1.9 percent were nonexistent units on interview day and 0.2 percent were noninterviews.
- interviewers were very successful in converting nonresponse cases to complete and partial interviews during NRCO. At the national level they converted 70.8 percent of the NRCO cases to complete interviews, 14.1 percent to partial interviews, 11.4 percent to vacant units and 1.5 percent to nonexistent units. Only 2.2 percent of the NRCO cases finished as refusals.
- automating the interviewing enhanced the quality of data captured in the interviews, expedited the turnaround time for reassigning interviews and getting feedback to the interviewers, and instilled the interviewers with a sense of professionalism and purpose.
- the Quality Assurance operation helped keep the rate of error low and detected a high level of data quality.

## How effective was the QA?

Based on a review of the results, the Quality Assurance of Person Interviewing was successful in ensuring appropriate results from both the telephone and personal visit phases of the operation. Overall there were only 190 (0.13 percent of the randomly sampled cases and 0.85 percent of the targeted cases) cases that failed the QA. For all such cases a replacement interview was obtained and used in the survey. We effectively weeded out several interviewers whose work contained discrepancies. This was accomplished more so by targeting for problematic cases than through cases in the preselected sample. Because the failure rate in the random sample is quite low, the volume of errors in Person Interviewing was under control.

We conclude that:

- Targeting cases to identify discrepant results was successful.  
The overall failure rate for the targeted cases (0.85 percent) compared to the randomly selected cases (0.13 percent) is dramatically different. This pattern holds for both telephone and personal visit interviews. This suggests the targeting was very effective in identifying cases that were likely to fail the quality assurance.
- The quality of the person interview cases not checked by Quality Assurance is high.  
Overall, 11.6 percent of the interviews had a QA interview (34,895 out of 300,913 interviews). Of the 11.6 percent with QA, the failure rate for the randomly selected cases was very small (0.13 percent) compared to the targeted cases (0.85 percent). The 95.1 percent of cases not in randomly selected QA can be assumed to have a remaining error rate similar to that of the randomly selected QA cases (0.13 percent). However, 171 of the remaining errors were corrected in the targeted QA sample.

In addition, the person followup operation in the person matching phase of A.C.E. was designed to identify and correct, to the extent possible, any remaining discrepant results after the match to the census roster. (See Childers et al, 2001).

- Automation enhanced the quality of the ACE Person Interviewing operation.  
Because of the data edits and automated skip patterns, as well as the quick turnaround time for PI cases to get assigned and completed in QA, automating both the original person interview and the quality assurance reinterview enhanced the overall quality and efficiency of the Person Interview operation.

## References

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# Appendices

Appendix 1: Person Interviewing Operation

Appendix 2: Telephone Phase

Appendix 3: Personal Visit Phase



## Appendix 1: Person Interviewing Operation

Table 1a. Distribution of PI Workload by Telephone and Personal Visit Phases-  
A.C.E. Regional Offices: Unweighted

A.C.E. Regional Office	Total Workload	Telephone Phase	Personal Visit Phase
Total	300,913	88,573	212,340
Boston	23,504	6,829	16,675
New York	17,434	3,376	14,058
Philadelphia	24,558	7,587	16,971
Detroit	23,199	7,837	15,362
Chicago	23,819	7,849	15,970
Kansas City	22,702	7,715	14,987
Seattle	24,050	7,390	16,660
Charlotte	29,027	8,077	20,950
Atlanta	27,466	8,510	18,956
Dallas	27,713	7,772	19,941
Denver	31,048	7,780	23,268
Los Angeles	26,393	7,851	18,542

## Appendix 1

Table 1b. Distribution of PI workload by Telephone and Personal Visit Phases -  
A.C.E. Regional Offices: Percent

A.C.E. Regional Office	Total Workload Percent	Telephone Phase Percent	Personal Visit Phase Percent
Total	100	29.4	70.6
Boston	100	29.1	70.9
New York	100	19.4	80.6
Philadelphia	100	30.9	69.1
Detroit	100	33.8	66.2
Chicago	100	33.0	67.0
Kansas City	100	34.0	66.0
Seattle	100	30.7	69.3
Charlotte	100	27.8	72.2
Atlanta	100	31.0	69.0
Dallas	100	28.0	72.0
Denver	100	25.1	74.9
Los Angeles	100	29.7	70.3

# Appendix 1

Table 2a. Distribution of PI Workload by Interview Week- Unweighted (21-Boston)

Phase	Week Starting On	Number	Percent of PI Workload
All	Total	23,504	100
Telephone	Total Telephone	6,829	29.1
	April 23, 2000	1,390	5.9
	April 30, 2000	1,541	6.6
	May 7, 2000	2,204	9.4
	May 14, 2000	568	2.4
	May 21, 2000	533	2.3
	May 28, 2000	341	1.5
	June 4, 2000	243	1.0
	June 11, 2000	9	0.0
Personal Visit	Total Personal Visit	16,675	70.9
	June 18, 2000	1,574	6.7
	June 25, 2000	3,690	15.7
	July 2, 2000	3,683	15.7
	July 9, 2000	3,224	13.7
	July 16, 2000	1,546	6.6
	July 23, 2000	825	3.5
	July 30, 2000	558	2.4
	Aug 6, 2000	506	2.2
	Aug 13, 2000	521	2.2
	Aug 20, 2000	400	1.7
	Aug 27, 2000	148	0.6
	Sept 3, 2000	0	0.0
	Sept 10, 2000	0	0.0

# Appendix 1

Table 2b. Distribution of PI Workload by Interview Week- Unweighted (22-New York)

Phase	Week Starting On	Number	Percent of PI Workload
All	Total	17,434	100
Telephone	Total Telephone	3,376	19.4
	April 23, 2000	803	4.6
	April 30, 2000	996	5.7
	May 7, 2000	798	4.6
	May 14, 2000	516	3.0
	May 21, 2000	193	1.1
	May 28, 2000	44	0.3
	June 4, 2000	26	0.1
	June 11, 2000	0	0.0
Personal Visit	Total Personal Visit	14,058	80.6
	June 18, 2000	1,317	7.6
	June 25, 2000	1,686	9.7
	July 2, 2000	3,477	19.9
	July 9, 2000	2,579	14.8
	July 16, 2000	1,854	10.6
	July 23, 2000	921	5.3
	July 30, 2000	879	5.0
	Aug 6, 2000	616	3.5
	Aug 13, 2000	376	2.2
	Aug 20, 2000	255	1.5
	Aug 27, 2000	98	0.6
	Sept 3, 2000	0	0.0
	Sept 10, 2000	0	0.0

# Appendix 1

Table 2c. Distribution of PI Workload by Interview Week- Unweighted (23-Philadelphia)

Phase	Week Starting On	Number	Percent of PI Workload
All	Total	24,558	100
Telephone	Total Telephone	7,587	30.9
	April 23, 2000	248	1.0
	April 30, 2000	502	2.0
	May 7, 2000	1,048	4.3
	May 14, 2000	1,574	6.4
	May 21, 2000	3,191	13.0
	May 28, 2000	901	3.7
	June 4, 2000	122	0.5
	June 11, 2000	1	0.0
Personal Visit	Total Personal Visit	16,971	69.1
	June 18, 2000	2,478	10.1
	June 25, 2000	3,917	15.9
	July 2, 2000	4,098	16.7
	July 9, 2000	3,316	13.5
	July 16, 2000	1,647	6.7
	July 23, 2000	746	3.0
	July 30, 2000	460	1.9
	Aug 6, 2000	219	0.9
	Aug 13, 2000	90	0.4
	Aug 20, 2000	0	0.0
	Aug 27, 2000	0	0.0
	Sept 3, 2000	0	0.0
	Sept 10, 2000	0	0.0

# Appendix 1

Table 2d. Distribution of PI Workload by Interview Week- Unweighted (24-Detroit)

Phase	Week Starting On	Number	Percent of PI Workload
All	Total	23,199	100
Telephone	Total Telephone	7,837	33.8
	April 23, 2000	1,421	6.1
	April 30, 2000	2,319	10.0
	May 7, 2000	2,078	9.0
	May 14, 2000	1,377	5.9
	May 21, 2000	421	1.8
	May 28, 2000	212	0.9
	June 4, 2000	9	0.0
	June 11, 2000	0	0.0
Personal Visit	Total Personal Visit	15,362	66.2
	June 18, 2000	2,428	10.5
	June 25, 2000	6,082	26.2
	July 2, 2000	3,023	13.0
	July 9, 2000	1,809	7.8
	July 16, 2000	1,079	4.7
	July 23, 2000	401	1.7
	July 30, 2000	306	1.3
	Aug 6, 2000	215	0.9
	Aug 13, 2000	19	0.1
	Aug 20, 2000	0	0.0
	Aug 27, 2000	0	0.0
	Sept 3, 2000	0	0.0
	Sept 10, 2000	0	0.0

# Appendix 1

Table 2e. Distribution of PI Workload by Interview Week- Unweighted (25-Chicago)

Phase	Week Starting On	Number	Percent of PI Workload
All	Total	23,819	100
Telephone	Total Telephone	7,849	33.0
	April 23, 2000	932	3.9
	April 30, 2000	2,160	9.1
	May 7, 2000	2,528	10.6
	May 14, 2000	1,238	5.2
	May 21, 2000	625	2.6
	May 28, 2000	252	1.1
	June 4, 2000	113	0.5
	June 11, 2000	1	0.0
Personal Visit	Total Personal Visit	15,970	67.0
	June 18, 2000	3,304	13.9
	June 25, 2000	4,979	20.9
	July 2, 2000	2,265	9.5
	July 9, 2000	2,318	9.7
	July 16, 2000	1,401	5.9
	July 23, 2000	706	3.0
	July 30, 2000	398	1.7
	Aug 6, 2000	334	1.4
	Aug 13, 2000	160	0.7
	Aug 20, 2000	72	0.3
	Aug 27, 2000	33	0.1
	Sept 3, 2000	0	0.0
	Sept 10, 2000	0	0.0

Appendix 1

Table 2f. Distribution of PI Workload by Interview Week- Unweighted (26-Kansas City)

Phase	Week Starting On	Number	Percent of PI Workload
All	Total	22,702	100
Telephone	Total Telephone	7,715	34.0
	April 23, 2000	196	0.9
	April 30, 2000	1,979	8.7
	May 7, 2000	1,710	7.5
	May 14, 2000	2,978	13.1
	May 21, 2000	690	3.0
	May 28, 2000	127	0.6
	June 4, 2000	33	0.1
	June 11, 2000	2	0.0
Personal Visit	Total Personal Visit	14,987	66.0
	June 18, 2000	2,916	12.8
	June 25, 2000	3,563	15.7
	July 2, 2000	3,697	16.3
	July 9, 2000	2,657	11.7
	July 16, 2000	1,217	5.4
	July 23, 2000	638	2.8
	July 30, 2000	193	0.9
	Aug 6, 2000	102	0.4
	Aug 13, 2000	4	0.0
	Aug 20, 2000	0	0.0
	Aug 27, 2000	0	0.0
	Sept 3, 2000	0	0.0
	Sept 10, 2000	0	0.0



Appendix 1

Table 2g. Distribution of PI Workload by Interview Week- Unweighted (27-Seattle)

Phase	Week Starting On	Number	Percent of PI Workload
All	Total	24,050	100
Telephone	Total Telephone	7,390	30.7
	April 23, 2000	481	2.0
	April 30, 2000	1,030	4.3
	May 7, 2000	2,716	11.3
	May 14, 2000	1,742	7.2
	May 21, 2000	911	3.8
	May 28, 2000	376	1.6
	June 4, 2000	132	0.5
	June 11, 2000	2	0.0
Personal Visit	Total Personal Visit	16,660	69.3
	June 18, 2000	3,438	14.3
	June 25, 2000	4,504	18.7
	July 2, 2000	3,194	13.3
	July 9, 2000	2,402	10.0
	July 16, 2000	1,358	5.6
	July 23, 2000	583	2.4
	July 30, 2000	737	3.1
	Aug 6, 2000	375	1.6
	Aug 13, 2000	69	0.3
	Aug 20, 2000	0	0.0
	Aug 27, 2000	0	0.0
	Sept 3, 2000	0	0.0
	Sept 10, 2000	0	0.0

## Appendix 1

Table 2h. Distribution of PI Workload by Interview Week- Unweighted (28-Charlotte)

Phase	Week Starting On	Number	Percent of PI Workload
All	Total	29,027	100
Telephone	Total Telephone	8,077	27.8
	April 23, 2000	368	1.3
	April 30, 2000	1,769	6.1
	May 7, 2000	2,896	10.0
	May 14, 2000	1,794	6.2
	May 21, 2000	923	3.2
	May 28, 2000	147	0.5
	June 4, 2000	163	0.6
	June 11, 2000	17	0.1
Personal Visit	Total Personal Visit	20,950	72.2
	June 18, 2000	4,236	14.6
	June 25, 2000	5,625	19.4
	July 2, 2000	3,623	12.5
	July 9, 2000	3,327	11.5
	July 16, 2000	1,933	6.7
	July 23, 2000	1,151	4.0
	July 30, 2000	299	1.0
	Aug 6, 2000	521	1.8
	Aug 13, 2000	222	0.8
	Aug 20, 2000	13	0.0
	Aug 27, 2000	0	0.0
	Sept 3, 2000	0	0.0
	Sept 10, 2000	0	0.0

# Appendix 1

Table 2i. Distribution of PI Workload by Interview Week- Unweighted (29-Atlanta)

Phase	Week Starting On	Number	Percent of PI Workload
	Total	27,466	100
Telephone	Total Telephone	8,510	31.0
	April 23, 2000	177	0.6
	April 30, 2000	2,431	8.9
	May 7, 2000	3,314	12.1
	May 14, 2000	1,832	6.7
	May 21, 2000	624	2.3
	May 28, 2000	118	0.4
	June 4, 2000	14	0.1
	June 11, 2000	0	0.0
Personal Visit	Total Personal Visit	18,956	69.0
	June 18, 2000	2,090	7.6
	June 25, 2000	5,195	18.9
	July 2, 2000	4,286	15.6
	July 9, 2000	3,271	11.9
	July 16, 2000	1,954	7.1
	July 23, 2000	735	2.7
	July 30, 2000	498	1.8
	Aug 6, 2000	456	1.7
	Aug 13, 2000	199	0.7
	Aug 20, 2000	178	0.6
	Aug 27, 2000	57	0.2
	Sept 3, 2000	36	0.1
	Sept 10, 2000	1	0.0

# Appendix 1

Table 2j. Distribution of PI Workload by Interview Week- Unweighted (30-Dallas)

Phase	Week Starting On	Number	Percent of PI Workload
All	Total	27,713	100
Telephone	Total Telephone	7,772	28.0
	April 23, 2000	0	0.0
	April 30, 2000	958	3.5
	May 7, 2000	2,092	7.5
	May 14, 2000	2,940	10.6
	May 21, 2000	1,226	4.4
	May 28, 2000	444	1.6
	June 4, 2000	112	0.4
	June 11, 2000	0	0.0
Personal Visit	Total Personal Visit	19,941	72.0
	June 18, 2000	3,719	13.4
	June 25, 2000	5,769	20.8
	July 2, 2000	4,662	16.8
	July 9, 2000	2,777	10.0
	July 16, 2000	1,440	5.2
	July 23, 2000	579	2.1
	July 30, 2000	419	1.5
	Aug 6, 2000	459	1.7
	Aug 13, 2000	96	0.3
	Aug 20, 2000	21	0.1
	Aug 27, 2000	0	0.0
	Sept 3, 2000	0	0.0
	Sept 10, 2000	0	0.0

# Appendix 1

Table 2k. Distribution of PI Workload by Interview Week- Unweighted (31-Denver)

Phase	Week Starting On	Number	Percent of PI Workload
All	Total	31,048	100
Telephone	Total Telephone	7,780	25.1
	April 23, 2000	385	1.2
	April 30, 2000	2,974	9.6
	May 7, 2000	2,531	8.2
	May 14, 2000	1,562	5.0
	May 21, 2000	303	1.0
	May 28, 2000	23	0.1
	June 4, 2000	0	0.0
	June 11, 2000	2	0.0
Personal Visit	Total Personal Visit	23,268	74.9
	June 18, 2000	9,413	30.3
	June 25, 2000	7,446	24.0
	July 2, 2000	3,447	11.1
	July 9, 2000	1,869	6.0
	July 16, 2000	741	2.4
	July 23, 2000	191	0.6
	July 30, 2000	129	0.4
	Aug 6, 2000	32	0.1
	Aug 13, 2000	0	0.0
	Aug 20, 2000	0	0.0
	Aug 27, 2000	0	0.0
	Sept 3, 2000	0	0.0
	Sept 10, 2000	0	0.0

Appendix 1

Table 21. Distribution of PI Workload by Interview Week- Unweighted (32-Los Angeles)

Phase	Week Starting On	Number	Percent of PI Workload
All	Total	26,393	100
Telephone	Total Telephone	7,851	29.7
	April 23, 2000	1,298	4.9
	April 30, 2000	1,931	7.3
	May 7, 2000	1,723	6.5
	May 14, 2000	1,607	6.1
	May 21, 2000	857	3.2
	May 28, 2000	247	0.9
	June 4, 2000	187	0.7
	June 11, 2000	1	0.0
Personal Visit	Total Personal Visit	18,542	70.3
	June 18, 2000	8,291	31.4
	June 25, 2000	4,785	18.1
	July 2, 2000	2,187	8.3
	July 9, 2000	1,795	6.8
	July 16, 2000	868	3.3
	July 23, 2000	288	1.1
	July 30, 2000	181	0.7
	Aug 6, 2000	147	0.6
	Aug 13, 2000	0	0.0
	Aug 20, 2000	0	0.0
	Aug 27, 2000	0	0.0
	Sept 3, 2000	0	0.0
	Sept 10, 2000	0	0.0

Appendix 1

Table 3a. PI Weekly Workload -Unweighted (21-Boston)

	Overall	Telephone Phase	Personal Visit Phase
Median Number of Cases per Week	568	550.5	825
Mean Number of Cases per Week	1,237.1	853.6	1,515.9
Maximum Number of Cases per Week	3,690	2,204	3,690
Minimum Number of Cases per Week	9	9	148

Table 3b. PI Weekly Workload -Unweighted (22-New York)

	Overall	Telephone Phase	Personal Visit Phase
Median Number of Cases per Week	800.5	516	921
Mean Number of Cases per Week	968.6	482.3	1,278.0
Maximum Number of Cases per Week	3,477	996	3,477
Minimum Number of Cases per Week	26	26	98

# Appendix 1

Table 3c. PI Weekly Workload -Unweighted (23-Philadelphia)

	Overall	Telephone Phase	Personal Visit Phase
Median Number of Cases per Week	901	701.5	1,647
Mean Number of Cases per Week	1,444.6	948.4	1,885.7
Maximum Number of Cases per Week	4,098	3,191	4,098
Minimum Number of Cases per Week	1	1	90

Table 3d. PI Weekly Workload -Unweighted (24-Detroit)

	Overall	Telephone Phase	Personal Visit Phase
Median Number of Cases per Week	1,228	1,377	1,079
Mean Number of Cases per Week	1,449.9	1,119.6	1,706.9
Maximum Number of Cases per Week	6,082	2,319	6,082
Minimum Number of Cases per Week	9	9	19



# Appendix 1

Table 3e. PI Weekly Workload -Unweighted (25-Chicago)

	Overall	Telephone Phase	Personal Visit Phase
Median Number of Cases per Week	706	778.5	706
Mean Number of Cases per Week	1,253.6	981.1	1,451.8
Maximum Number of Cases per Week	4,979	2,528	4,979
Minimum Number of Cases per Week	1	1	33

Table 3f. PI Weekly Workload -Unweighted (26-Kansas City)

	Overall	Telephone Phase	Personal Visit Phase
Median Number of Cases per Week	690	443	1,217
Mean Number of Cases per Week	1,335.4	964.4	1,665.2
Maximum Number of Cases per Week	3,697	2,978	3,697
Minimum Number of Cases per Week	2	2	4

Table 3g. PI Weekly Workload -Unweighted (27-Seattle)

	Overall	Telephone Phase	Personal Visit Phase
Median Number of Cases per Week	911	696	1,358
Mean Number of Cases per Week	1,414.7	923.8	1,851.1
Maximum Number of Cases per Week	4,504	2,716	4,504
Minimum Number of Cases per Week	2	2	69

Table 3h. PI Weekly Workload -Unweighted (28-Charlotte)

	Overall	Telephone Phase	Personal Visit Phase
Median Number of Cases per Week	1,037	645.5	1,542
Mean Number of Cases per Week	1,612.6	1,009.6	2,095.0
Maximum Number of Cases per Week	5,625	2,896	5,625
Minimum Number of Cases per Week	13	17	13

Table 3i. PI Weekly Workload -Unweighted (29-Atlanta)

	Overall	Telephone Phase	Personal Visit Phase
Median Number of Cases per Week	561	624	498
Mean Number of Cases per Week	1,373.3	1,215.1	1,458.2
Maximum Number of Cases per Week	5,195	3,314	5,195
Minimum Number of Cases per Week	1	14	1

Table 3j. PI Weekly Workload -Unweighted (30-Dallas)

	Overall	Telephone Phase	Personal Visit Phase
Median Number of Cases per Week	958	958	1,009.5
Mean Number of Cases per Week	1630.2	1110.3	1,994.1
Maximum Number of Cases per Week	5,769	2,940	5,769
Minimum Number of Cases per Week	0	0	21

Table 3k. PI Weekly Workload -Unweighted (31-Denver)

	Overall	Telephone Phase	Personal Visit Phase
Median Number of Cases per Week	563	344	1,305
Mean Number of Cases per Week	1,940.5	972.5	2,908.5
Maximum Number of Cases per Week	9,413	2,974	9,413
Minimum Number of Cases per Week	0	0	32

Table 3l. PI Weekly Workload -Unweighted (32-Los Angeles)

	Overall	Telephone Phase	Personal Visit Phase
Median Number of Cases per Week	1,083	1,077.5	1,331.5
Mean Number of Cases per Week	1,649.6	981.4	2,317.8
Maximum Number of Cases per Week	8,291	1,931	8,291
Minimum Number of Cases per Week	1	1	147

**Appendix 2: Telephone Phase****Table 4a. Distribution of PI Workload During the Telephone Phase by Field Outcome Code for Interview Day and A.C.E. Regional Office -Unweighted**

A.C.E. Regional Office	Total Cases	Complete Interviews	Partial Interviews	Refusal, No knowl Resp or Language Barrier	Vacant on Interview Day	Nonexistent on Interview Day
Total	88,573	84,180	4,341	32	13	7
Boston	6,829	6,650	176	2	1	0
New York	3,376	3,117	258	1	0	0
Philadelphia	7,587	7,212	371	4	0	0
Detroit	7,837	7,553	283	1	0	0
Chicago	7,849	7,469	380	0	0	0
Kansas City	7,715	7,480	234	1	0	0
Seattle	7,390	7,003	383	2	2	0
Charlotte	8,077	7,564	494	17	0	2
Atlanta	8,510	7,985	516	1	6	2
Dallas	7,772	7,336	432	2	1	1
Denver	7,780	7,453	325	0	1	1
Los Angeles	7,851	7,358	489	1	2	1

## Appendix 2

**Table 4b. Distribution of PI Workload (Occupied Units) During the Telephone Phase by Field Outcome Code for Interview Day and A.C.E. Regional Office -Unweighted**

A.C.E. Regional Office	Total Interviews at Occupied Units (number)	Complete Interviews (percent)	Partial Interviews (percent)	Refusal, No Knwl Resp or Language Barrier (percent)
Total	88,553	95.1	4.9	0.0
Boston	6,828	97.4	2.6	0.0
New York	3,376	92.3	7.6	0.0
Philadelphia	7,587	95.1	4.9	0.0
Detroit	7,837	96.4	3.6	0.0
Chicago	7,849	95.2	4.8	0.0
Kansas City	7,715	97.0	3.0	0.0
Seattle	7,388	94.8	5.2	0.0
Charlotte	8,075	93.7	6.1	0.2
Atlanta	8,502	93.9	6.1	0.0
Dallas	7,770	94.4	5.6	0.0
Denver	7,778	95.8	4.2	0.0
Los Angeles	7,848	93.8	6.2	0.0

Note that there are no Tables 5 or 6 in the Appendices.

## Appendix 2

**Table 7a. Distribution of the Telephone Phase PI Workload by Census and Interview Day Status -Unweighted (21-Boston)**

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	6,829 (100%)	6,826 (100%)	1 (0.0%)	0 (0.0%)	2 (0.0%)
Occupied Units	6,823 (99.9%)	6,822 (99.9%)	1 (0.0%)	0 (0.0%)	0 (0.0%)
Vacant Units	3 (0.0%)	3 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Nonexistent Units	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Refusals/No Occupied Information Provided	3 (0.0%)	1 (0.0%)	0 (0.0%)	0 (0.0%)	2 (0.0%)

**Table 7b. Distribution of the Telephone Phase PI Workload by Census and Interview Day Status -Unweighted (22-New York)**

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	3,376 (100%)	3,375 (100%)	0 (0.0%)	0 (0.0%)	1 (0.0%)
Occupied Units	3,366 (99.7%)	3,366 (99.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Vacant Units	2 (0.1%)	2 (0.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Nonexistent Units	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Refusals/No Occupied Information Provided	8 (0.2%)	7 (0.2%)	0 (0.0%)	0 (0.0%)	1 (0.0%)

## Appendix 2

**Table 7c. Distribution of the Telephone Phase PI Workload by Census and Interview Day Status -Unweighted (23-Philadelphia)**

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	7,587 (100%)	7,583 (99.9)	0 (0.0 %)	0 (0.0%)	4 (0.1%)
Occupied Units	7,566 (99.7%)	7,566 (99.7 %)	0 (0.0 %)	0 (0.0%)	0 (0.0%)
Vacant Units	3 (0.0%)	3 (0.0 %)	0 (0.0 %)	0 (0.0%)	0 (0.0%)
Nonexistent Units	0 (0.0%)	0 (0.0 %)	0 (0.0 %)	0 (0.0 %)	0 (0.0%)
Refusals/No Occupied Information Provided	18 (0.2%)	14 (0.2 %)	0 (0.0 %)	0 (0.0 %)	4 (0.1%)

**Table 7d. Distribution of the Telephone Phase PI Workload by Census and Interview Day Status -Unweighted (24-Detroit)**

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	7,837 (100%)	7,836 (100%)	0 (0.0%)	0 (0.0%)	1 (0.0%)
Occupied Units	7,829 (99.9%)	7,829 (99.9%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Vacant Units	4 (0.1%)	4 (0.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Nonexistent Units	1 (0.0%)	1 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Refusals/No Occupied Information Provided	3 (0.0%)	2 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.0%)



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Table 7e. Distribution of the Telephone Phase PI Workload by Census and Interview Day Status -Unweighted (25-Chicago)

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	7,849 (100%)	7,849 (100%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Occupied Units	7,839 (99.9%)	7,839 (99.9%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Vacant Units	2 (0.0%)	2 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Nonexistent Units	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Refusals/No Occupied Information Provided	8 (0.1%)	8 (0.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

Table 7f. Distribution of the Telephone Phase PI Workload by Census and Interview Day Status -Unweighted (26-Kansas City)

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	7,715 (100%)	7,714 (100%)	0 (0.0%)	0 (0.0%)	1 (0.0%)
Occupied Units	7,705 (99.9%)	7,705 (99.9%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Vacant Units	4 (0.1%)	4 (0.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Nonexistent Units	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Refusals/No Occupied Information Provided	6 (0.1%)	5 (0.1%)	0 (0.0%)	0 (0.0%)	1 (0.0%)

## Appendix 2

**Table 7g. Distribution of the Telephone Phase PI Workload by Census and Interview Day Status -Unweighted (27-Seattle)**

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	7,390 (100%)	7,386 (99.9%)	2 (0.0%)	0 (0.0%)	2 (0.0%)
Occupied Units	7,380 (99.9%)	7,378 (99.8%)	2 (0.0%)	0 (0.0%)	0 (0.0%)
Vacant Units	1 (0.0%)	1 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Nonexistent Units	1 (0.0%)	1 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Refusals/No Occupied Information Provided	8 (0.1%)	6 (0.1%)	0 (0.0%)	0 (0.0%)	2 (0.0%)

**Table 7h. Distribution of the Telephone Phase PI Workload by Census and Interview Day Status -Unweighted (28-Charlotte)**

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	8,077 (100%)	8,058 (99.8%)	0 (0.0%)	2 (0.0%)	17 (0.2%)
Occupied Units	8,044 (99.6%)	8,044 (99.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Vacant Units	3 (0.0%)	3 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Nonexistent Units	2 (0.0%)	0 (0.0%)	0 (0.0%)	2 (0.0%)	0 (0.0%)
Refusals/No Occupied Information Provided	28 (0.3%)	11 (0.1%)	0 (0.0%)	0 (0.0%)	17 (0.2%)

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Table 7i. Distribution of the Telephone Phase PI Workload by Census and Interview Day Status -Unweighted (29-Atlanta)

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	8,510 (100%)	8,501 (99.9%)	6 (0.1%)	2 (0.0%)	1 (0.0%)
Occupied Units	8,479 (99.6%)	8,475 (99.6%)	4 (0.0%)	0 (0.0%)	0 (0.0%)
Vacant Units	5 (0.1%)	3 (0.0%)	2 (0.0%)	0 (0.0%)	0 (0.0%)
Nonexistent Units	2 (0.0%)	0 (0.0%)	0 (0.0%)	2 (0.0%)	0 (0.0%)
Refusals/No Occupied Information Provided	24 (0.3%)	23 (0.3%)	0 (0.0%)	0 (0.0%)	1 (0.0%)

Table 7j. Distribution of the Telephone Phase PI Workload by Census and Interview Day Status -Unweighted (30-Dallas)

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	7,772 (100%)	7,768 (99.9%)	1 (0.0%)	1 (0.0%)	2 (0.0%)
Occupied Units	7,745 (99.7%)	7,745 (99.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Vacant Units	6 (0.1%)	5 (0.1%)	1 (0.0%)	0 (0.0%)	0 (0.0%)
Nonexistent Units	1 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.0%)	0 (0.0%)
Refusals/No Occupied Information Provided	20 (0.3%)	18 (0.2%)	0 (0.0%)	0 (0.0%)	2 (0.0%)

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**Table 7k. Distribution of the Telephone Phase PI Workload by Census and Interview Day Status -Unweighted (31-Denver)**

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	7,780 (100%)	7,778 (100%)	1 (0.0%)	1 (0.0%)	0 (0.0%)
Occupied Units	7,760 (99.7%)	7,760 (99.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Vacant Units	9 (0.1%)	8 (0.1%)	1 (0.0%)	0 (0.0%)	0 (0.0%)
Nonexistent Units	2 (0.0%)	1 (0.0%)	0 (0.0%)	1 (0.0%)	0 (0.0%)
Refusals/No Occupied Information Provided	9 (0.1%)	9 (0.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

**Table 7l. Distribution of the Telephone Phase PI Workload by Census and Interview Day Status -Unweighted (32-Los Angeles)**

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	7,851 (100%)	7,847 (99.9%)	2 (0.0%)	1 (0.0%)	1 (0.0%)
Occupied Units	7,829 (99.7%)	7,829 (99.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Vacant Units	7 (0.1%)	6 (0.1%)	1 (0.0%)	0 (0.0%)	0 (0.0%)
Nonexistent Units	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Refusals/No Occupied Information Provided	15 (0.2%)	12 (0.2%)	1 (0.0%)	1 (0.0%)	1 (0.0%)

Appendix 2

Table 8a. Distribution of the Telephone Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status- Unweighted (21-Boston)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	6,829	6,826	1	0	2
Hhldr	Total Hhldr	6,827	6,826	0	0	1
	Number of Occupied Units	6,822	6,822	0	0	0
	Number of Vacant Units	3	3	0	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	2	1	0	0	1
Proxy	Total Proxy	2	0	1	0	1
	Number of Occupied Units	1	0	1	0	0
	Number of Vacant Units	0	0	0	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	1	0	0	0	1

Appendix 2

Table 8b. Distribution of the Telephone Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (22-New York)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	3,376	3,375	0	0	1
Hhldr	Total Hhldr	3,375	3,375	0	0	0
	Number of Occupied Units	3,366	3,366	0	0	0
	Number of Vacant Units	2	2	0	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	7	7	0	0	0
Proxy	Total Proxy	1	0	0	0	1
	Number of Occupied Units	0	0	0	0	0
	Number of Vacant Units	0	0	0	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	1	0	0	0	1

# Appendix 2

Table 8c. Distribution of the Telephone Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (23-Philadelphia)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	7,587	7,583	0	0	4
Hhldr	Total Hhldr	7,583	7,583	0	0	0
	Number of Occupied Units	7,566	7,566	0	0	0
	Number of Vacant Units	3	3	0	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	14	14	0	0	0
Proxy	Total Proxy	4	0	0	0	4
	Number of Occupied Units	0	0	0	0	0
	Number of Vacant Units	0	0	0	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	4	0	0	0	4

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Table 8d. Distribution of the Telephone Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status- Unweighted (24-Detroit)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	7,837	7,836	0	0	1
Hhldr	Total Hhldr	7,835	7,835	0	0	0
	Number of Occupied Units	7,828	7,828	0	0	0
	Number of Vacant Units	4	4	0	0	0
	Number of Nonexistent Units	1	1	0	0	0
	Number of Refusals/No Occupied Information Provided	2	2	0	0	0
Proxy	Total Proxy	2	1	0	0	1
	Number of Occupied Units	1	1	0	0	0
	Number of Vacant Units	0	0	0	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	1	0	0	0	1



Appendix 2

Table 8e. Distribution of the Telephone Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (25-Chicago)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	7,849	7,849	0	0	0
Hhldr	Total Hhldr	7,849	7,849	0	0	0
	Number of Occupied Units	7,839	7,839	0	0	0
	Number of Vacant Units	2	2	0	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	8	8	0	0	0
Proxy	Total Proxy	0	0	0	0	0
	Number of Occupied Units	0	0	0	0	0
	Number of Vacant Units	0	0	0	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	0	0	0	0	0

Appendix 2

Table 8f. Distribution of the Telephone Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (26-Kansas City)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	7,715	7,714	0	0	1
Hhldr	Total Hhldr	7,714	7,714	0	0	0
	Number of Occupied Units	7,705	7,705	0	0	0
	Number of Vacant Units	4	4	0	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	5	5	0	0	0
Proxy	Total Proxy	1	0	0	0	1
	Number of Occupied Units	0	0	0	0	0
	Number of Vacant Units	0	0	0	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	1	0	0	0	1

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Table 8g. Distribution of the Telephone Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (27-Seattle)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	7,390	7,386	2	0	2
Hhldr	Total Hhldr	7,386	7,386	0	0	0
	Number of Occupied Units	7,378	7,378	0	0	0
	Number of Vacant Units	1	1	0	0	0
	Number of Nonexistent Units	1	1	0	0	0
	Number of Refusals/No Occupied Information Provided	6	6	0	0	0
Proxy	Total Proxy	4	0	2	0	2
	Number of Occupied Units	2	0	2	0	0
	Number of Vacant Units	0	0	0	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	2	0	0	0	2

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Table 8h. Distribution of the Telephone Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (28-Charlotte)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	8,077	8,058	0	2	17
Hhldr	Total Hhldr	8,058	8,057	0	0	1
	Number of Occupied Units	8,043	8,043	0	0	0
	Number of Vacant Units	3	3	0	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	12	11	0	0	1
Proxy	Total Proxy	19	1	0	2	16
	Number of Occupied Units	1	1	0	0	0
	Number of Vacant Units	0	0	0	0	0
	Number of Nonexistent Units	2	0	0	2	0
	Number of Refusals/No Occupied Information Provided	16	0	0	0	16

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Table 8i. Distribution of the Telephone Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (29-Atlanta)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	8,510	8,501	6	2	1
Hhldr	Total Hhldr	8,501	8,501	0	0	0
	Number of Occupied Units	8,475	8,475	0	0	0
	Number of Vacant Units	3	3	0	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	23	23	0	0	0
Proxy	Total Proxy	9	0	6	2	1
	Number of Occupied Units	4	0	4	0	0
	Number of Vacant Units	2	0	2	0	0
	Number of Nonexistent Units	2	0	0	2	0
	Number of Refusals/No Occupied Information Provided	1	0	0	0	1

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Table 8j. Distribution of the Telephone Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (30-Dallas)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	7,772	7,768	1	1	2
Hhldr	Total Hhldr	7,768	7,768	0	0	0
	Number of Occupied Units	7,745	7,745	0	0	0
	Number of Vacant Units	5	5	0	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	18	18	0	0	0
Proxy	Total Proxy	4	0	1	1	2
	Number of Occupied Units	0	0	0	0	0
	Number of Vacant Units	1	0	1	0	0
	Number of Nonexistent Units	1	0	0	1	0
	Number of Refusals/No Occupied Information Provided	2	0	0	0	2

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Table 8k. Distribution of the Telephone Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (31-Denver)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	7,780	7,778	1	1	0
Hhldr	Total Hhldr	7,778	7,778	0	0	0
	Number of Occupied Units	7,760	7,760	0	0	0
	Number of Vacant Units	8	8	0	0	0
	Number of Nonexistent Units	1	1	0	0	0
	Number of Refusals/No Occupied Information Provided	9	9	0	0	0
Proxy	Total Proxy	2	0	1	1	0
	Number of Occupied Units	0	0	0	0	0
	Number of Vacant Units	1	0	1	0	0
	Number of Nonexistent Units	1	0	0	1	0
	Number of Refusals/No Occupied Information Provided	0	0	0	0	0

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Table 81. Distribution of the Telephone Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status- Unweighted (32-Los Angeles)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	7,851	7,847	2	1	1
Hhldr	Total Hhldr	7,848	7,847	0	0	1
	Number of Occupied Units	7,829	7,829	0	0	0
	Number of Vacant Units	6	6	0	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	13	12	0	0	1
Proxy	Total Proxy	3	0	2	1	0
	Number of Occupied Units	0	0	0	0	0
	Number of Vacant Units	1	0	1	0	0
	Number of Nonexistent Units	0	0	0	0	0
	Number of Refusals/No Occupied Information Provided	2	0	1	1	0



**Appendix 3: Personal Visit Phase**

**Table 9a. Distribution of the Personal Visit PI Workload by Interview Day Field Outcome Code- A.C.E.**  
**Regional Offices: Unweighted**

A.C.E. Regional Office	Total Workload	Complete Interviews	Partial Interviews	Refusal, No Knwl Resp or Language Barrier	Vacant on Interview Day	Nonexistent on Interview Day
Total	212,340	168,382	9,879	341	29,649	4,089
Boston	16,675	14,380	96	21	1,978	200
New York	14,058	11,843	1,100	20	769	326
Philadelphia	16,971	13,513	978	20	2,148	312
Detroit	15,362	12,402	633	10	2,103	214
Chicago	15,970	12,996	801	41	1,901	231
Kansas City	14,987	11,974	538	19	2,123	333
Seattle	16,660	13,621	857	37	1,853	292
Charlotte	20,950	15,496	1,050	74	3,868	462
Atlanta	18,956	13,826	980	9	3,770	371
Dallas	19,941	15,747	823	14	2,860	497
Denver	23,268	17,407	857	5	4,424	575
Los Angeles	18,542	15,177	1,166	71	1,852	276

### Appendix 3

Table 9b. Distribution of the Personal Visit PI Workload at Occupied Units by Interview Day Field Outcome Code- A.C.E. Regional Offices: Percent

A.C.E. Regional Office	Total Interviews at Occupied Units (number)	Complete Interviews (percent)	Partial Interviews (percent)	Refusal, No Knwl Resp or Language Barrier (percent)
Totals	178,602	94.3	5.5	0.2
Boston	14,497	99.2	0.7	0.1
New York	12,963	91.4	8.5	0.1
Philadelphia	14,511	93.1	6.7	0.1
Detroit	13,045	95.1	4.8	0.1
Chicago	13,838	93.9	5.8	0.3
Kansas City	12,531	95.6	4.3	0.1
Seattle	14,515	93.8	5.9	0.3
Charlotte	16,620	93.2	6.3	0.4
Atlanta	14,815	93.3	6.6	0.1
Dallas	16,584	94.9	5.0	0.1
Denver	18,269	95.3	4.7	0.0
Los Angeles	16,414	92.5	7.1	0.4

There are no Tables 10 or 11 provided in the Appendices.

Appendix 3

Table 12a. Distribution Personal Visit Phase PI Workload by Census and Interview Day Status -Unweighted  
(Percentage of Total Cases) Boston-21

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	16,675 (100%)	14,476 (86.8%)	1,978 (11.9%)	200 (1.2%)	21 (0.1%)
Occupied Units	13,957 (83.7%)	13,639 (81.8%)	315 (1.9%)	3 (0.0%)	0 (0.0%)
Vacant Units	2,439 (14.6%)	825 (4.9%)	1,600 (9.6%)	14 (0.1%)	0 (0.0%)
Nonexistent Units	246 (1.5%)	9 (0.1%)	55 (0.3%)	182 (1.1%)	0 (0.0%)
Refusals /No Occupied Information Provided	33 (0.2%)	3 (0.0%)	8 (0.0%)	1 (0.0%)	21 (0.1%)

Table 12b. Distribution of Personal Visit Phase PI Workload by Census and Interview Day Status -Unweighted  
(Percentage of Total Cases) New York-22

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	14,058 (100%)	12,943 (92.1%)	769 (5.5%)	326 (2.3%)	20 (0.1%)
Occupied Units	12,774 (90.9%)	12,642 (89.9%)	129 (0.9%)	3 (0.0%)	0 (0.0%)
Vacant Units	586 (4.2%)	207 (1.5%)	376 (2.7%)	3 (0.0%)	0 (0.0%)
Nonexistent Units	510 (3.6%)	5 (0.0%)	204 (1.5%)	301 (2.1%)	0 (0.0%)
Refusals /No Occupied Information Provided	188 (1.3%)	89 (0.6%)	60 (0.4%)	19 (0.1%)	20 (0.1%)

### Appendix 3

Table 12c. Distribution of Personal Visit Phase PI Workload by Census and Interview Day Status -Unweighted (Percentage of Total Cases) Philadelphia-23

Census Day Status	Interview Day Status				
	Total	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total	16,971 (100%)	14,491 (85.4%)	2,148 (12.7%)	312 (1.8%)	20 (0.1%)
Occupied Units	14,214 (83.8%)	13,915 (82.0%)	296 (1.7%)	3 (0.0%)	0 (0.0%)
Vacant Units	1,744 (10.3%)	464 (2.7%)	1,275 (7.5%)	5 (0.0%)	0 (0.0%)
Nonexistent Units	739 (4.4%)	9 (0.1%)	453 (2.7%)	277 (1.6%)	0 (0.0%)
Refusals /No Occupied Information Provided	274 (1.6%)	103 (0.6%)	124 (0.7%)	27 (0.2%)	20 (0.1%)

Table 12d. Distribution of Personal Visit Phase PI Workload by Census and Interview Day Status -Unweighted (Percentage of Total Cases) Detroit-24

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	15,362 (100%)	13,035 (84.9%)	2,103 (13.7%)	214 (1.4%)	10 (0.1%)
Occupied Units	12,823 (83.5%)	12,539 (81.6%)	278 (1.8%)	6 (0.0%)	0 (0.0%)
Vacant Units	1,707 (11.1%)	427 (2.8%)	1,270 (8.3%)	10 (0.1%)	0 (0.0%)
Nonexistent Units	616 (4.0%)	9 (0.1%)	424 (2.8%)	183 (1.2%)	0 (0.0%)
Refusals /No Occupied Information Provided	216 (1.4%)	60 (0.4%)	131 (0.9%)	15 (0.1%)	10 (0.1%)

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Table 12e. Distribution of Personal Visit Phase PI Workload by Census and Interview Day Status -Unweighted  
(Percentage of Total Cases) Chicago-25

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	15,970 (100%)	13,797 (86.4%)	1,901 (11.9%)	231 (1.4%)	41 (0.3%)
Occupied Units	13,616 (85.3%)	13,293 (83.2%)	318 (2.0%)	5 (0.0%)	0 (0.0%)
Vacant Units	1,564 (9.8%)	442 (2.8%)	1,118 (7.0%)	4 (0.0%)	0 (0.0%)
Nonexistent Units	636 (4.0%)	9 (0.1%)	414 (2.6%)	213 (1.3%)	0 (0.0%)
Refusals /No Occupied Information Provided	154 (1.0%)	53 (0.3%)	51 (0.3%)	9 (0.1%)	41 (0.3%)

Table 12f. Distribution of Personal Visit Phase PI Workload by Census and Interview Day Status -Unweighted  
(Percentage of Total Cases) Kansas City-26

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	14,987 (100%)	12,512 (83.5%)	2,123 (14.2%)	333 (2.2%)	19 (0.1%)
Occupied Units	12,267 (81.9%)	11,916 (79.5%)	343 (2.3%)	8 (0.1%)	0 (0.0%)
Vacant Units	1,772 (11.8%)	527 (3.5%)	1,235 (8.2%)	10 (0.1%)	0 (0.0%)
Nonexistent Units	800 (5.3%)	14 (0.1%)	489 (3.3%)	297 (2.0%)	0 (0.0%)
Refusals /No Occupied Information Provided	148 (1.0%)	55 (0.4%)	56 (0.4%)	18 (0.1%)	19 (0.1%)

### Appendix 3

Table 12g. Distribution of Personal Visit Phase PI Workload by Census and Interview Day Status -Unweighted  
(Percentage of Total Cases) Seattle-27

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	16,660 (100%)	14,478 (86.9%)	1,853 (11.1%)	292 (1.8%)	37 (0.2%)
Occupied Units	14,262 (85.6%)	13,893 (83.4%)	365 (2.2%)	4 (0.0%)	0 (0.0%)
Vacant Units	1,629 (9.8%)	462 (2.8%)	1,162 (7.0%)	5 (0.0%)	0 (0.0%)
Nonexistent Units	565 (3.4%)	26 (0.2%)	258 (1.5%)	281 (1.7%)	0 (0.0%)
Refusals /No Occupied Information Provided	204 (1.2%)	97 (0.6%)	68 (0.4%)	2 (0.0%)	37 (0.2%)

Table 12h. Distribution of Personal Visit Phase PI Workload by Census and Interview Day Status -Unweighted  
(Percentage of Total Cases) Charlotte-28

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	20,950 (100%)	16,546 (79.0%)	3,868 (18.5%)	462 (2.2%)	74 (0.4%)
Occupied Units	16,369 (78.1%)	15,809 (75.5%)	551 (2.6%)	9 (0.0%)	0 (0.0%)
Vacant Units	2,942 (14.0%)	630 (3.0%)	2,304 (11.0%)	7 (0.0%)	1 (0.0%)
Nonexistent Units	1,255 (6.0%)	15 (0.1%)	826 (3.9%)	414 (2.0%)	0 (0.0%)
Refusals /No Occupied Information Provided	384 (1.8%)	92 (0.4%)	187 (0.9%)	32 (0.2%)	73 (0.3%)

Appendix 3

Table 12i. Distribution of Personal Visit Phase PI Workload by Census and Interview Day Status -Unweighted  
(Percentage of Total Cases) Atlanta-29

Census Day Status	Interview Day Status				
	Total	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total	18,956 (100%)	14,806 (78.1%)	3,770 (19.9%)	371 (2.0%)	9 (0.0%)
Occupied Units	15,083 (79.6%)	14,238 (75.1%)	835 (4.4%)	9 (0.0%)	1 (0.0%)
Vacant Units	2,651 (14.0%)	453 (2.4%)	2,193 (11.6%)	5 (0.0%)	0 (0.0%)
Nonexistent Units	985 (5.2%)	24 (0.1%)	621 (3.3%)	340 (1.8%)	0 (0.0%)
Refusals /No Occupied Information Provided	237 (1.3%)	91 (0.5%)	121 (0.6%)	17 (0.1%)	8 (0.0%)

Table 12j. Distribution of Personal Visit Phase PI Workload by Census and Interview Day Status -Unweighted  
(Percentage of Total Cases) Dallas-30

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	19,941 (100%)	16,570 (83.1%)	2,860 (14.3%)	497 (2.5%)	14 (0.1%)
Occupied Units	16,151 (81.0%)	15,865 (78.7%)	451 (2.3%)	14 (0.1%)	1 (0.0%)
Vacant Units	2,323 (11.6%)	764 (3.8%)	1,545 (7.7%)	14 (0.1%)	0 (0.0%)
Nonexistent Units	1,214 (6.1%)	20 (0.1%)	751 (3.8%)	443 (2.2%)	0 (0.0%)
Refusals /No Occupied Information Provided	253 (1.3%)	101 (0.5%)	113 (0.6%)	26 (0.1%)	13 (0.1%)

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Table 12k. Distribution of Personal Visit Phase PI Workload by Census and Interview Day Status -Unweighted  
(Percentage of Total Cases) Denver-31

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	23,268 (100%)	18,264 (78.5%)	4,424 (19.0%)	575 (2.5%)	5 (0.0%)
Occupied Units	18,132 (77.9%)	17,441 (75.0%)	680 (2.9%)	11 (0.0%)	0 (0.0%)
Vacant Units	3,135 (13.5%)	748 (3.2%)	2,370 (10.2%)	17 (0.1%)	0 (0.0%)
Non Existent Units	1,799 (7.7%)	22 (0.1%)	1,251 (5.4%)	526 (2.3%)	0 (0.0%)
Refusals /No Occupied Information Provided	202 (0.9%)	53 (0.2%)	123 (0.5%)	21 (0.1%)	5 (0.0%)

Table 12l. Distribution of Personal Visit Phase PI Workload by Census and Interview Day Status -Unweighted  
(Percentage of Total Cases) Los Angeles-32

Census Day Status	Interview Day Status				
	Total Cases	Occupied Units (Complete and Partial Interviews)	Vacant Units	Nonexistent Units	Refusals/No Occupied Information Provided
Total Cases	18,542 (100%)	16,343 (88.1%)	1,852 (10.0%)	276 (1.5%)	71 (0.4%)
Occupied Units	16,116 (86.9%)	15,797 (85.2%)	316 (1.7%)	3 (0.0%)	0 (0.0%)
Vacant Units	1,370 (7.4%)	491 (2.6%)	875 (4.7%)	4 (0.0%)	0 (0.0%)
Non Existent Units	832 (4.5%)	3 (0.0%)	575 (3.1%)	254 (1.4%)	0 (0.0%)
Refusals/No Occupied Information Provided	224 (1.2%)	52 (0.3%)	86 (0.5%)	15 (0.1%)	71 (0.4%)



## Appendix 3

Table 13a. Distribution of the Personal Visit Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (21-Boston)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	16,675	14,476	1,978	200	21
Hhldr	Total Hhldr	13,924	13,924	0	0	0
	Number of Occupied Units	13,117	13,117	0	0	0
	Number of Vacant Units	796	796	0	0	0
	Number of Nonexistent Units	8	8	0	0	0
	Number of Refusals/No Occupied Information Provided	3	3	0	0	0
Proxy	Total Proxy	2,751	552	1,978	200	21
	Number of Occupied Units	840	522	315	3	0
	Number of Vacant Units	1,643	29	1,600	14	0
	Number of Nonexistent Units	238	1	55	182	0
	Number of Refusals/No Occupied Information Provided	30	0	8	1	21

Appendix 3

Table 13b. Distribution of the Personal Visit Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (22-New York)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	14,058	12,943	769	326	20
Hhldr	Total Hhldr	11,504	11,504	0	0	0
	Number of Occupied Units	11,245	11,245	0	0	0
	Number of Vacant Units	176	176	0	0	0
	Number of Nonexistent Units	4	4	0	0	0
	Number of Refusals/No Occupied Information Provided	79	79	0	0	0
Proxy	Total Proxy	2,554	1,439	769	326	20
	Number of Occupied Units	1,529	1,397	129	3	0
	Number of Vacant Units	410	31	376	3	0
	Number of Nonexistent Units	506	1	204	301	0
	Number of Refusals/No Occupied Information Provided	109	10	60	19	20

Appendix 3

Table 13c. Distribution of the Personal Visit Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (23-Philadelphia)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	16,971	14,491	2,148	312	20
Hhldr	Total Hhldr	13,143	13,143	0	0	0
	Number of Occupied Units	12,612	12,612	0	0	0
	Number of Vacant Units	432	432	0	0	0
	Number of Nonexistent Units	8	8	0	0	0
	Number of Refusals/No Occupied Information Provided	91	91	0	0	0
Proxy	Total Proxy	3,828	1,348	2,148	312	20
	Number of Occupied Units	1,602	1,303	296	3	0
	Number of Vacant Units	1,312	32	1,275	5	0
	Number of Nonexistent Units	731	1	453	277	0
	Number of Refusals/No Occupied Information Provided	183	12	124	27	20

Appendix 3

Table 13d. Distribution of the Personal Visit Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (24-Detroit)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	15,362	13,035	2,103	214	10
Hhldr	Total Hhldr	12,083	12,081	2	0	0
	Number of Occupied Units	11,624	11,624	0	0	0
	Number of Vacant Units	392	392	0	0	0
	Number of Nonexistent Units	9	9	0	0	0
	Number of Refusals/No Occupied Information Provided	58	56	2	0	0
Proxy	Total Proxy	3,279	954	2,101	214	10
	Number of Occupied Units	1,199	915	278	6	0
	Number of Vacant Units	1,315	35	1,270	10	0
	Number of Nonexistent Units	607	0	424	183	0
	Number of Refusals/No Occupied Information Provided	158	4	129	15	10

Appendix 3

Table 13e. Distribution of the Personal Visit Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (25-Chicago)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	15,970	13,797	1,901	231	41
Hhldr	Total Hhldr	12,613	12,613	0	0	0
	Number of Occupied Units	12,167	12,167	0	0	0
	Number of Vacant Units	389	389	0	0	0
	Number of Nonexistent Units	7	7	0	0	0
	Number of Refusals/No Occupied Information Provided	50	50	0	0	0
Proxy	Total Proxy	3,357	1,184	1,901	231	41
	Number of Occupied Units	1,449	1,126	318	5	0
	Number of Vacant Units	1,175	53	1,118	4	0
	Number of Nonexistent Units	629	2	414	213	0
	Number of Refusals/No Occupied Information Provided	104	3	51	9	41

## Appendix 3

Table 13f. Distribution of the Personal Visit Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (26-Kansas City)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	14,987	12,512	2,123	333	19
Hhldr	Total Hhldr	11,744	11,743	1	0	0
	Number of Occupied Units	11,188	11,187	1	0	0
	Number of Vacant Units	491	491	0	0	0
	Number of Nonexistent Units	13	13	0	0	0
	Number of Refusals/No Occupied Information Provided	52	52	0	0	0
Proxy	Total Proxy	3,243	769	2,122	333	19
	Number of Occupied Units	1,079	729	342	8	0
	Number of Vacant Units	1,281	36	1,235	10	0
	Number of Nonexistent Units	787	1	489	297	0
	Number of Refusals/No Occupied Information Provided	96	3	56	18	19

Appendix 3

Table 13g. Distribution of the Personal Visit Phase PI Workload by Household Member vs. Proxy, Census and Interview Say Status -Unweighted (27-Seattle)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	16,660	14,478	1,853	292	37
Hhldr	Total Hhldr	13,261	13,259	1	0	1
	Number of Occupied Units	12,729	12,728	1	0	0
	Number of Vacant Units	410	410	0	0	0
	Number of Nonexistent Units	24	24	0	0	0
	Number of Refusals/No Occupied Information Provided	98	97	0	0	1
Proxy	Total Proxy	3,399	1,219	1,852	292	36
	Number of Occupied Units	1,533	1,165	364	4	0
	Number of Vacant Units	1,219	52	1,162	5	0
	Number of Nonexistent Units	541	2	258	281	0
	Number of Refusals/No Occupied Information Provided	106	0	68	2	36

Appendix 3

Table 13h. Distribution of the Personal Visit Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (28-Charlotte)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	20,950	16,546	3,868	462	74
Hhldr	Total Hhldr	14,993	14,992	0	0	1
	Number of Occupied Units	14,342	14,342	0	0	0
	Number of Vacant Units	561	561	0	0	0
	Number of Nonexistent Units	15	15	0	0	0
	Number of Refusals/No Occupied Information Provided	75	74	0	0	1
Proxy	Total Proxy	5,957	1,554	3,868	462	73
	Number of Occupied Units	2,027	1,467	551	9	0
	Number of Vacant Units	2,381	69	2,304	7	1
	Number of Nonexistent Units	1,240	0	826	414	0
	Number of Refusals/No Occupied Information Provided	309	18	187	32	72



Appendix 3

Table 13i. Distribution of the Personal Visit Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (29-Atlanta)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	18,956	14,806	3,770	371	9
Hhldr	Total Hhldr	13,306	13,305	1	0	0
	Number of Occupied Units	12,818	12,817	1	0	0
	Number of Vacant Units	395	395	0	0	0
	Number of Nonexistent Units	9	9	0	0	0
	Number of Refusals/No Occupied Information Provided	84	84	0	0	0
Proxy	Total Proxy	5,650	1,501	3,769	371	9
	Number of Occupied Units	2,265	1,421	834	9	1
	Number of Vacant Units	2,256	58	2,193	5	0
	Number of Nonexistent Units	976	15	621	340	0
	Number of Refusals/No Occupied Information Provided	153	7	121	17	8

Appendix 3

Table 13j. Distribution of the Personal Visit Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (30-Dallas)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	19,941	16,570	2,860	497	14
Hhldr	Total Hhldr	15,274	15,272	1	0	1
	Number of Occupied Units	14,447	14,446	1	0	0
	Number of Vacant Units	711	711	0	0	0
	Number of Nonexistent Units	20	20	0	0	0
	Number of Refusals/No Occupied Information Provided	96	95	0	0	1
Proxy	Total Proxy	4,667	1,298	2,859	497	13
	Number of Occupied Units	1,704	1,239	450	14	1
	Number of Vacant Units	1,612	53	1,545	14	0
	Number of Nonexistent Units	1,194	0	751	443	0
	Number of Refusals/No Occupied Information Provided	157	6	113	26	12

Appendix 3

Table 13k. Distribution of the Personal Visit Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (31-Denver)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	23,268	18,264	4,424	575	5
Hhldr	Total Hhldr	17,162	17,161	1	0	0
	Number of Occupied Units	16,416	16,415	1	0	0
	Number of Vacant Units	681	681	0	0	0
	Number of Nonexistent Units	21	21	0	0	0
	Number of Refusals/No Occupied Information Provided	44	44	0	0	0
Proxy	Total Proxy	6,106	1,103	4,423	575	5
	Number of Occupied Units	1,716	1,026	679	11	0
	Number of Vacant Units	2,454	67	2,370	17	0
	Number of Nonexistent Units	1,778	1	1,251	526	0
	Number of Refusals/No Occupied Information Provided	158	9	123	21	5

Appendix 3

Table 131. Distribution of the Personal Visit Phase PI Workload by Household Member vs. Proxy, Census and Interview Day Status -Unweighted (32-Los Angeles)

Interview with Hhd Member/ Proxy	Census Day Status	Interview Day Status				
		Total	Number of Occupied Units	Number of Vacant Units	Number of Nonexistent Units	Number of Refusals/No Occupied Information Provided
All	Total	18,542	16,343	1,852	276	71
Hhldr	Total Hhldr	15,069	15,067	1	1	0
	Number of Occupied Units	14,574	14,573	1	0	0
	Number of Vacant Units	448	448	0	0	0
	Number of Nonexistent Units	3	2	0	1	0
	Number of Refusals/No Occupied Information Provided	44	44	0	0	0
Proxy	Total Proxy	3,473	1,276	1,851	275	71
	Number of Occupied Units	1,542	1,224	315	3	0
	Number of Vacant Units	922	43	875	4	0
	Number of Nonexistent Units	829	1	575	253	0
	Number of Refusals/No Occupied Information Provided	180	8	86	15	71